



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at wvOASIS.gov. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at WVPurchasing.gov with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 2

List View

- General Information**
- Contact
- Default Values
- Discount
- Document Information
- Clarification Request

Procurement Folder: 1886131
 Procurement Type: Central Master Agreement
 Vendor ID: VS0000037660
 Legal Name: TRYFACTA INC
 Alias/DBA:
 Total Bid: \$10,493,038.40
 Response Date: 04/14/2026
 Response Time: 9:55
 Responded By User ID: Tryfacta
 First Name: Adesh
 Last Name: Tyagi
 Email: rfp@tryfacta.com
 Phone: 4088935500

SO Doc Code: CRFQ
 SO Dept: 0803
 SO Doc ID: DOT2600000079
 Published Date: 3/31/26
 Close Date: 4/14/26
 Close Time: 13:30
 Status: Closed
 Solicitation Description: WVDOT IT Temporary Staffing Services (81260081)
 Total of Header Attachments: 2
 Total of All Attachments: 2



Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Solicitation Response**

Proc Folder: 1886131
Solicitation Description: WVDOT IT Temporary Staffing Services (81260081)
Proc Type: Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2026-04-14 13:30	SR 0803 ESR03162600000005966	1

VENDOR
 VS0000037660
 TRYFACTA INC

Solicitation Number: CRFQ 0803 DOT2600000079
Total Bid: 10493038.40000000037252902984 **Response Date:** 2026-04-14 **Response Time:** 09:55:32
Comments:

FOR INFORMATION CONTACT THE BUYER
 John W Estep
 304-558-2566
 john.w.estep@wv.gov

Vendor Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Senior Mainframe Application Analyst				937476.80

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior Mainframe Application Analyst

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Mainframe Application Analyst				370323.20

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Mainframe Application Analyst

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Senior Application Oracle Database Administrator				807539.20

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior Application Oracle Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Application Oracle Database Administrator				749278.40

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Application Oracle Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Senior Application DB2 Database Administrator				827299.20

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior Application DB2 Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Application DB2 Database Administrator				717537.60

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Application DB2 Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	PC Programmer Analyst				322337.60

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

PC Programmer Analyst

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
8	Senior PC Programmer Analyst				722716.80

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior PC Programmer Analyst

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
9	Application SQL Server Database Administrator				703809.60

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Application SQL Server Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
10	Senior Application Oracle Server Database Administrator				817897.60

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior Application Oracle Server Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
11	GIS Database Administrator				366038.40

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

GIS Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
12	Senior GIS Database Administrator				661918.40

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior GIS Database Administrator

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
13	GIS Architect				983777.60

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

GIS Architect

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
14	GIS Application Developer				637020.80

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

GIS Application Developer

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
15	Senior GIS Application Developer				868067.20

Comm Code	Manufacturer	Specification	Model #
80111609			

Commodity Line Comments:

Extended Description:

Senior GIS Application Developer



Response to "81260081"
Titled: WVDOT IT Temporary Staffing Services

Due: April 14, 2026 @ 1:30 PM

Submitted by:

Arman Dhar, EVP & COO
Address: 4637 Chabot Drive, Suite 100,
Pleasanton, CA, 94588
Phone: 408-893-5500 & 925-640-3641
E-Mail ID: rfp@tryfacta.com
FAX: 408-503-0934
Website: www.tryfacta.com

Submitted to:

Bid Clerk
Department Of Administration
Purchasing Division
2019 Washington St E, Charleston WV 25305, US

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Cover Letter

To: Bid Clerk, Department Of Administration

Date: April 14, 2026

Tryfacta, Inc. submits this response to the West Virginia Department of Transportation (WVDOT) for RFP # 81260081, titled “WVDOT Information Technology Temporary Staffing Services,” and confirms its ability to support WVDOT’s operational and project-based needs through the placement of qualified Information Technology (IT) professionals. Tryfacta will provide temporary IT staffing services for short-term, long-term, and as-needed assignments across all required classifications, including mainframe systems, database administration (Oracle, DB2, SQL Server), application development (PC Programmer Analysts), and GIS services, fully aligned with the Scope of Work and all contractual requirements of the solicitation.

Founded in 1996, Tryfacta is a corporation with a long-standing focus on delivering Information Technology (IT) Temporary Staffing Services to public-sector organizations nationwide. Tryfacta currently supports a workforce of over **4,500 professionals across all 50 states and has successfully executed more than 250 temporary staffing contracts for state, local, cooperative, and federal government clients**, demonstrating sustained performance, scalability, and compliance within regulated environments. Tryfacta operates from its public-sector headquarters in Pleasanton, California, maintains a local **Client Engagement & Delivery Office (CEDO) in Beckley, WV**, to directly support this engagement, and sustains a nationwide network of 45+ CEDO offices across multiple states to ensure scalable, multi-jurisdictional IT staffing delivery and operational continuity.

Tryfacta’s recruitment and workforce administration processes supporting Information Technology (IT) staffing services are governed by **ISO 9001:2015, ISO/IEC 27001, ISO/IEC 20000-1:2018, and CMMI Level 3** frameworks, ensuring standardized, secure, and auditable staffing delivery. We maintain access to a national candidate pool of **5.5M+ profiles**, supported by an experienced account management team with deep public-sector IT staffing expertise. Tryfacta has administered **1M+ temporary IT staffing labor hours**, demonstrating the capacity to support high-volume, multi-department public-sector programs while maintaining compliance, reporting accuracy, and operational oversight. Tryfacta is an **Equal Opportunity Employer (EEO)** and is committed to fair, inclusive, and non-discriminatory hiring practices.

Tryfacta brings over three decades of experience supporting public-sector clients, including **50+ transportation and transit agencies nationwide**, such as *Sound Transit (WA)*, *Washington Metropolitan Area Transit Authority (WMATA) (DC)*, *San Francisco Bay Area Rapid Transit (BART) (CA)*, *Southern California Regional Rail Authority (Metrolink) (CA)*, *Orange County Transportation Authority (CA)*, *Santa Clara Valley Transportation Authority (CA)*, *Utah Transit Authority (UT)*, *Dallas Fort Worth International Airport (TX)*, *Port of Long Beach (CA)*, and *Port of Los Angeles (CA)*. To support this engagement, Tryfacta will leverage a dedicated local Account Management Team, anchored by its CEDO in West Virginia, with a combined experience of 50+ years in delivering IT staffing services for public-sector clients.

Tryfacta agrees to comply with all applicable statutes and regulations governing this solicitation and acknowledges receipt of **Addendum #1 and #2**, taking no exceptions to any terms, conditions, or requirements. The undersigned is authorized to bind the Offeror.


Regards,



Arman Dhar, EVP & COO | Tryfacta Inc., Head Office: 4637 Chabot Drive, Suite 100, Pleasanton, CA 94588 | **Local Office:** 110 Main ST Beckley, WV, 25801, USA | **Phone Number:** 925-640-3641 & 408-893-5500 | **Email ID:** rfp@tryfacta.com

Signed CRFQ / Bid Form

#1

	Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	State of West Virginia Centralized Request for Quote Service - Prof
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Proc Folder: 1886131 Doc Description: WVDOT IT Temporary Staffing Services (81260081)		Reason for Modification:	
Proc Type: Central Master Agreement			
Date Issued	Solicitation Closes	Solicitation No	Version
2026-03-12	2026-03-31 13:30	CRFQ 0803 DOT2600000079	1


BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Customer Code: [VS0000037660](#)
 Vendor Name : [Tryfacta, Inc.](#)
 Address : [4637 Chabot Drive,](#)
 Street : [Suite 100,](#)
 City : [Pleasanton](#)
 State : [CA](#) Country : [USA](#) Zip : [94588](#)
 Principal Contact : [Arman Dhar](#)
 Vendor Contact Phone: [925-640-3641 and 408-893-5500](#) Extension: -

FOR INFORMATION CONTACT THE BUYER
 John W Estep
 304-558-2566
john.w.estep@wv.gov

Vendor Signature X  FEIN# [611732454](#) DATE [April 14, 2026](#)

All offers subject to all terms and conditions contained in this solicitation

#2

	Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	State of West Virginia Centralized Request for Quote Service - Prof
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Proc Folder: 1886131 Doc Description: WVDOT IT Temporary Staffing Services (81260081) Proc Type: Central Master Agreement	Reason for Modification: ADDENDUM NO_1 Bid Opening Moves to April 14, 2026 Attach Revised Terms and Conditions								
<table border="1"> <thead> <tr> <th>Date Issued</th> <th>Solicitation Closes</th> <th>Solicitation No</th> <th>Version</th> </tr> </thead> <tbody> <tr> <td>2026-03-25</td> <td>2026-04-14 13:30</td> <td>CRFQ 0803 DOT2600000079</td> <td>2</td> </tr> </tbody> </table>	Date Issued	Solicitation Closes	Solicitation No	Version	2026-03-25	2026-04-14 13:30	CRFQ 0803 DOT2600000079	2	
Date Issued	Solicitation Closes	Solicitation No	Version						
2026-03-25	2026-04-14 13:30	CRFQ 0803 DOT2600000079	2						

BID RECEIVING LOCATION BID CLERK DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON ST E CHARLESTON WV 25305 US
--

VENDOR Vendor Customer Code: VS0000037660 Vendor Name : Tryfacta, Inc. Address : 4637 Chabot Drive, Street : Suite 100 City : Pleasanton State : CA Country : USA Zip : 94588 Principal Contact : Arman Dhar Vendor Contact Phone: 925-640-3641 and 408-893-5500 Extension: -
--

FOR INFORMATION CONTACT THE BUYER John W Estep 304-558-2566 john.w.estep@wv.gov

Vendor Signature X 	FEIN# 611732454	DATE April 14, 2026
--	-----------------	---------------------

All offers subject to all terms and conditions contained in this solicitation

Addendum Acknowledgement (#1 and #2)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFO DOT260000079

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge the addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:


(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of the addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Tryfacta, Inc.

Company



Authorized Signature

April 14, 2026

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFQ DOT2600000079

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge the addenda may result in bid disqualification.

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- | | |
|--|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

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Tryfacta, Inc.

Company


Authorized Signature

April 14, 2026

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

Pricing Page / Exhibit A

Exhibit A - Pricing Page

WVDOT Information Technology Staffing Services RFQ(81260081)

CRQM DOT26*44

Contract Item	Description	Est. Qty.	Unit of Measure	Year 1 Unit Cost	Year 2 Unit Cost	Year 3 Unit Cost	Year 4 Unit Cost	Extended Cost
4.1.1	Senior Mainframe Application Analyst	2080	EA	\$109.35	\$111.54	\$113.77	\$116.05	\$9,37,476.80
4.1.2	Mainframe Application Analyst	2080	EA	\$43.20	\$44.06	\$44.94	\$45.84	\$3,70,323.20
4.1.3	Senior Application Oracle Database Administrator	2080	EA	\$94.20	\$96.08	\$98.00	\$99.96	\$8,07,539.20
4.1.4	Application Oracle Database Administrator	2080	EA	\$87.40	\$89.15	\$90.93	\$92.75	\$7,49,278.40
4.1.5	Senior Application DB2 Database Administrator	2080	EA	\$96.50	\$98.43	\$100.40	\$102.41	\$8,27,299.20
4.1.6	Application DB2 Database Administrator	2080	EA	\$83.70	\$85.37	\$87.08	\$88.82	\$7,17,537.60
4.1.7	PC Programmer Analyst	2080	EA	\$37.60	\$38.35	\$39.12	\$39.90	\$3,22,337.60
4.1.8	Senior PC Programmer Analyst	2080	EA	\$84.30	\$85.99	\$87.71	\$89.46	\$7,22,716.80
4.1.9	Application SQL Server Database Administrator	2080	EA	\$82.10	\$83.74	\$85.41	\$87.12	\$7,03,809.60
4.1.10	Senior Application Oracle Database Administrator	2080	EA	\$95.40	\$97.31	\$99.26	\$101.25	\$8,17,897.60
4.1.11	GIS Database Administrator	2080	EA	\$42.70	\$43.55	\$44.42	\$45.31	\$3,66,038.40

4.1.12	Senior GIS Database Administrator	2080	EA	\$77.21	\$78.75	\$80.33	\$81.94	\$6,61,918.40
4.1.13	GIS Architect	2080	EA	\$114.75	\$117.05	\$119.39	\$121.78	\$9,83,777.60
4.1.14	GIS Application Developer	2080	EA	\$74.30	\$75.79	\$77.31	\$78.86	\$6,37,020.80
4.1.15	Senior GIS Application Developer	2080	EA	\$101.25	\$103.28	\$105.35	\$107.46	\$8,68,067.20
Grand Total								\$1,04,93,038.40



Arman Dhar, EVP & COO

Response to Section 3. Qualifications

Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

3.1. Vendors shall have been in business a minimum of five (5) years, providing similar information technology services. Vendors must provide documentation to indicate that their company meets this requirement prior to award; however, bidders may include this documentation with their bid.

Tryfacta hereby **confirms that it has been continuously in business since March 1996, providing Information Technology staffing and professional services for over 30 years, thereby fully meeting and exceeding the minimum five (5) years' experience requirement.**

Tryfacta is a dynamic, minority and woman-owned firm (certified by the State of WV) with **30 years of experience delivering temporary professional staffing services** to more than **250 government and public-sector organizations nationwide**, including state agencies, transit authorities, counties, municipal authorities, and regulated public institutions operating in compliance-driven environments. Tryfacta provides qualified professionals across all service areas defined under the contract. We have extensive experience managing compliance-sensitive programs that require consistent documentation, accurate monthly reporting, workforce-hour monitoring, and continuity of service across departments. **Recognized by INC. Magazine** as one of the **fastest-growing staffing companies in the Pacific region**, Tryfacta continues to expand its public-sector footprint while maintaining disciplined operational controls and a commitment to service excellence. Tryfacta maintains a **stable Dun & Bradstreet (D&B) rating**, reflecting strong financial standing, operational stability, and responsible business practices.

Our staffing capabilities support the full range of WVDOT program needs, with a specialized focus on Information Technology staffing, including **application development, database administration, mainframe systems, GIS, and enterprise platforms, etc.** Leveraging our national recruiting infrastructure, regional candidate pipelines, and extensive public-sector experience, Tryfacta ensures the timely delivery of qualified professionals aligned with WVDOT operational, programmatic, and technology-related workforce requirements.

<p style="text-align: center;"><u>Large Scale & Depth</u></p> <ul style="list-style-type: none"> • Revenue Scale: \$57M+ annual revenue with sustained year-over-year growth • Contract Portfolio: 250+ active and completed temporary staffing and staff augmentation contracts • Public Sector Focus: 90%+ on government, municipality, clients • Operating History: 30 years delivering compliant staffing services both locally and nationally • Geographic Presence: Nationwide delivery across all 50 states with 30+ local offices in key regions, including WV • Process Maturity: ISO 9001:2015 – Quality Management, ISO/IEC 27001 – Information Security, ISO/IEC 20000-1 – IT Service Management (for tech-enabled roles), CMMI Level 3 – Defined & repeatable delivery processes 	<p style="text-align: center;"><u>Who We Serve</u></p> <ul style="list-style-type: none"> • Extensive experience supporting health and human services departments, state technology programs, and public-sector administrative operations • IT Agencies: NY OGS, Texas DIR, Maryland DGS, Sound Transit, WMATA, etc. • State Technology Programs: WVDOT IT, Statewide ITSA contracts, PBITS NY, etc. • 50+ transportation/ transit clients: Orange County Transportation Authority, Santa Clara Valley Transportation Authority, San Francisco Bay Area Rapid Transit (BART), Southern California Regional Rail Authority (Metrolink), Sound Transit, Utah Transit Authority, Dallas Fort Worth International Airport, Washington Metropolitan Area Transit Authority (WMATA), Port of Long Beach, Port of Los Angeles
<p style="text-align: center;"><u>Workforce Scale & Credentials</u></p> <ul style="list-style-type: none"> • Active Workforce: 4,500+ employees supported nationwide • Recruitment Organization: 110+ recruiters, sourcing specialists, and delivery staff • Resume Intelligence: 5.5M+ resume database with regional pool of 110K+ WV profiles • Bench Strength: Pre-screened, role-aligned professionals supporting 	<p style="text-align: center;"><u>Industry Recognition & Trust Indicators</u></p> <ul style="list-style-type: none"> • EEO Commitment: Equal Opportunity Employer with established EEO, affirmative action, and non-discrimination policies. • Woman-Led Leadership: Woman Chairperson-led organization, demonstrating strong executive accountability, inclusive leadership

<ul style="list-style-type: none"> • Company Memberships: AWS Partner Network ServiceNow Partner Ecosystem Oracle Partner Network IBM PartnerWorld 	<ul style="list-style-type: none"> • Performance Consistency: Strong assignment continuity and placement success across multi-year engagements • Compliance Record: 100% W2 delivery for public-sector clients • Operational Trust: Proven ability to support regulated, audit-sensitive environments
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Our support models include *short-term temporary assignments, project-based staffing, seasonal surge support, long-term contract placements, contract-to-hire conversions, and direct hire recruitment to address evolving workforce demands.* Our programs have included **50–100+ placements under single engagements and collectively account for over 1 million temporary IT/ professional hours administered nationwide.** Our programs consistently achieve a client satisfaction rate exceeding 99%, driven by stable account teams, measurable service performance, and disciplined contract management practices.

Year after year, we are honoured to be selected for an array of “top company” awards:

Temporary IT Staffing Services Contracts with Transportation Authorities: With nearly three decades of continuous operations, we have been delivering Information Technology staffing and professional services to public-sector clients across the United States, including over 50 transportation authorities, transit agencies, and infrastructure organizations. Our experience spans large-scale, multi-year engagements supporting mission-critical systems, legacy modernization, database administration, GIS platforms, and enterprise IT environments.

Client Name	Contract Title	Contract Duration	Similar Positions Served
Orange County Transportation Authority (CA)	IT Technical Staffing & Systems Support	01-01-2026 – 31-12-2028	Senior Application Administrator, Oracle Database Administrator, Application SQL Server Database Administrator, GIS Architect, GIS Application Developer
Santa Clara Valley Transportation Authority (CA)	IT & Infrastructure Staffing	04-03-2021 – 31-03-2026	Senior Application Administrator, DB2 Database Administrator, Application DB2 Database Administrator, Senior PC Programmer Analyst
San Francisco Bay Area Rapid Transit (BART) (CA)	IT Systems & Technical Support Staffing	24-03-2020 – 19-05-2027	Senior Mainframe Application Analyst, Mainframe Application Analyst, Senior Application Oracle Database Administrator
Southern California Regional Rail Authority (Metrolink) (CA)	IT Technical Support Services	01-06-2021 – 31-05-2026	Application Oracle Database Administrator, Application SQL Server Database Administrator, Senior PC Programmer Analyst
Sound Transit (WA)	IT Contractor & Systems Support	01-09-2023 – 31-08-2026	Senior GIS Database Administrator, GIS Database Administrator, GIS Application Developer
Utah Transit Authority (UT)	IT Staffing & Technical Recruiting	01-08-2024 – 26-03-2029	GIS Architect, Senior GIS Application Developer, GIS Application Developer

Dallas Fort Worth International Airport (TX)	IT Technical Staffing Services	04-08-2022 – 09-08-2026	Senior Application SQL Server Database Administrator, Application SQL Server Database Administrator, Senior PC Programmer Analyst
Washington Metropolitan Area Transit Authority (WMATA) (DC)	IT & Financial Systems Staffing	22-10-2025 – Present	Senior Application Oracle Database Administrator, Application Oracle Database Administrator, Senior Mainframe Application Analyst
Port of Long Beach (CA)	IT On-Call Technical Services	13-03-2023 – 28-02-2026	GIS Database Administrator, Senior GIS Database Administrator, GIS Application Developer
Port of Los Angeles (CA)	As-Needed IT Consulting & Recruitment Services	30-12-2025 – 30-12-2028	GIS Architect, Senior GIS Application Developer, Senior Application DB2 Database Administrator

Average Recruitment, Direct Hire/ Year in Last 7 years: Over the past seven (7) years, Tryfacta has demonstrated sustained and scalable growth in its recruitment operations, achieving an average compound annual growth rate (CAGR) of approximately **23–25%** in annual placements, reflecting strong financial stability, expanding delivery capacity, and the ability to support increasing staffing volumes across state, local, federal, and city-sector clients.

Year	Workforce	Similar Job Titles Deployed
2025	4,500+	Senior Mainframe Application Analyst, Mainframe Application Analyst, Senior Application Oracle Database Administrator, Application Oracle Database Administrator, Senior Application DB2 Database Administrator, Application DB2 Database Administrator, Senior Application SQL Server Database Administrator, Application SQL Server Database Administrator, GIS Architect, GIS Database Administrator, Senior GIS Database Administrator, GIS Application Developer, Senior GIS Application Developer, Senior PC Programmer Analyst
2024	4,100+	Mainframe Application Analyst, Application Oracle Database Administrator, Application DB2 Database Administrator, Application SQL Server Database Administrator, GIS Database Administrator, GIS Application Developer, Senior GIS Database Administrator, Senior PC Programmer Analyst
2023	3,600+	Senior PC Programmer Analyst, PC Programmer Analyst, Application SQL Server Database Administrator, GIS Application Developer, Application DB2 Database Administrator, GIS Database Administrator
2022	2,800+	PC Programmer Analyst, GIS Database Administrator, Application Oracle Database Administrator, Application DB2 Database Administrator
2021	2,100+	PC Programmer Analyst, Application SQL Server Database Administrator, GIS Application Developer
2020	1,300+	PC Programmer Analyst, Application Oracle Database Administrator, Application DB2 Database Administrator, Application SQL Server Database Administrator, GIS Database Administrator
2019	1,000+	PC Programmer Analyst, Application Oracle Database Administrator, Application DB2 Database Administrator, Application SQL Server Database Administrator

Representative IT Technical Staffing & Professional Services Contracts: *The following table highlights select public-sector engagements demonstrating our experience delivering large-scale IT staffing, staff augmentation, and technical consulting services across state, county, and transportation agencies of similar scope and complexity.* The representative contracts provided herein demonstrate our proven ability to deliver services of similar scope, size, and complexity, fully satisfying the requirement that vendors possess **a minimum of five (5) years of experience providing comparable IT services.**

Client	State	IT Technical Scope	Contract Duration	Total Placements	Contract Value
State of West Virginia – Statewide	WV	IT Technical Staffing & Support Services	15-08-2020 – 14-07-2026	45+	\$4.2M
State of Michigan	MI	IT Staffing & Technical Resources (Statewide)	01-11-2019 – 31-10-2028	30+	\$18.5M
State of Idaho Dept. of Administration	ID	IT Technical Staffing Services	01-11-2020 – 31-10-2026	95+	\$5.8M
State of Kansas	KS	IT Professional & Technical Staffing	01-06-2020 – 30-06-2031	20+	\$14.2M

State of Delaware	DE	IT Staffing & Consulting Services	01-12-2021 – 31-08-2027	75+	\$4.9M
State of Oklahoma OMES	OK	IT Staff Augmentation Services	10-04-2021 – 09-04-2026	60+	\$3.5M
NY State OGS	NY	IT Professional Services (Statewide)	25-10-2018 – 26-10-2027	80+	\$20.0M
Metropolitan Washington COG	DC	IT Technical & Program Support Staffing	01-09-2020 – 31-08-2026	70+	\$4.0M
City of Albuquerque	NM	IT Technical Staffing Services	01-07-2018 – 30-06-2026	110+	\$6.2M
City of Minneapolis	MN	IT & Technical Staffing Services	13-06-2018 – 12-06-2026	95+	\$5.5M
Miami-Dade County	FL	IT Staffing & Enterprise Support	01-01-2023 – 31-12-2028	60+	\$17.8M
Allegheny County	PA	IT Technical Staffing Services	01-04-2018 – 31-12-2028	90+	\$5.0M
County of San Diego	CA	IT Professional Staffing Services	21-02-2023 – 30-06-2027	80+	\$11.5M
Orange County Transportation Authority	CA	IT Technical Staffing & Systems Support	01-01-2018 – 31-12-2028	20+	\$7.5M
Santa Clara Valley Transportation Authority	CA	IT & Infrastructure Staffing	04-03-2021 – 31-03-2026	10+	\$13.2M
San Francisco Bay Area Rapid Transit (BART)	CA	IT Systems & Technical Support Staffing	24-03-2020 – 19-05-2027	40+	\$15.6M
Southern California Regional Rail Authority (Metrolink)	CA	IT Technical Support Services	01-06-2021 – 31-05-2026	60+	\$10.4M
Sound Transit	WA	IT Contractor & Systems Support	01-09-2023 – 31-08-2026	30+	\$8.6M
Utah Transit Authority	UT	IT Staffing & Technical Recruiting	01-08-2024 – 26-03-2029	50+	\$9.8M
Dallas Fort Worth International Airport	TX	IT Technical Staffing Services	04-08-2022 – 09-08-2026	70+	\$11.0M
Washington Metropolitan Area Transit Authority (WMATA)	DC	IT & Financial Systems Staffing	22-10-2020 – 26-10-2026	65+	\$3.9M
Port of Long Beach	CA	IT On-Call Technical Services	13-03-2020 – 28-02-2026	15+	\$6.5M
City of Phoenix	AZ	IT Staffing & Enterprise Services	01-04-2025 – 31-03-2030	80+	\$16.0M
University of Arizona	AZ	IT Staff Augmentation Services	15-09-2024 – 14-09-2029	40+	\$9.2M
State of Texas DIR	TX	IT Staff Augmentation (Statewide)	19-08-2018 – 31-08-2031	300+	\$22.5M
State of Maryland Department of General Services (DGS)	MD	IT Agile Resources & Technical Teams	01-05-2025 – 28-02-2035	50+	\$24.0M
University of Washington	WA	IT Staff Augmentation & Project Resources	01-03-2018 – 28-02-2028	25+	\$8.4M
City of Tacoma	WA	On-Call Technology & IT Services	01-01-2020 – 31-12-2028	20+	\$7.2M
New York Power Authority (NYPA)	NY	IT Contingent Staffing Services	22-09-2021 – 19-10-2026	25+	\$12.6M
State of Louisiana	LA	IT Staffing Support Services	01-07-2020 – 30-06-2029	40+	\$9.0M
County of Santa Clara	CA	IT Professional & Healthcare IT Services	01-03-2023 – 30-06-2029	25+	\$18.2M
San Bernardino County	CA	IT Staffing & Technical Support Services	28-03-2023 – 27-03-2028	10+	\$12.8M

University of Maryland Global Campus (UMGC)	MD	IT Staff Augmentation Services	11-02-2018– 30-06-2029	45+	\$6.8M
City of Philadelphia – Office of Innovation & Technology	PA	IT Staff Augmentation Services	01-01-2020– 31-12-2026	35+	\$6.5M
State of Oklahoma OMES (ITSA SW1025)	OK	IT Staff Augmentation Services (Statewide)	21-03-2018– 30-09-2030	20+	\$16.5M

Accordingly, Tryfacta fully satisfies Section 3.1 requirements related to vendor experience in delivering similar Information Technology services.

Certificate of Incorporation:

STATE OF DELAWARE
 SECRETARY OF STATE
 DIVISION OF CORPORATIONS
 FILED 09:00 AM 03/11/1996
 960069968 - 2596199

CERTIFICATE OF INCORPORATION
 FOR A STOCK CORPORATION

FIRST: The name of the Corporation is Systems Logic, Inc.;

SECOND: Its Registered Office in the state of Delaware is to be located at 3516-14 Silverside Road, Wilmington, New Castle County, Delaware 19810. The Registered Agent in charge thereof is Charles S. Knothe, Esquire;

THIRD: The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware;

FOURTH: The amount of the total authorized capital stock of this corporation is divided into 1000 shares, of no-par value;

FIFTH: The name and mailing address of the incorporator is Charles S. Knothe, P. A. of 3516-14 Silverside Road, Wilmington, DE 19810;

SIXTH: The powers of the incorporators are to terminate upon filing of the certificate of incorporation and the name and address of the person who is to serve as managing stockholder is as follows: Archana Tyagi, 125 Sunset Drive, Wilmington, DE 19809;

I, THE UNDERSIGNED, for the purpose of forming a corporation under the laws of the State of Delaware, do make, file and record this Certificate, and do certify that the facts herein stated are true, and I have accordingly hereunto set my hand.

Date:

Mary Ellen Knuth Charles S. Knothe
 Witness Charles S. Knothe

FROM : C S Knothe

TEL: 302 476 8988

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS P 4
FILED 09:00 AM 04/02/1999
991139193 - 2596199

STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION

SYSTEMS LOGIC, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware.

DOES HEREBY CERTIFY:

FIRST: That at a meeting of the Board of Directors of Systems Logic, Inc., resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "First" so that, as amended, said Article shall be and read as follows: The name of the corporation is Systems America Public Sector, Inc.

SECOND: That thereafter, pursuant to resolution of its Board of Directors, a special meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law

FROM : C S Knothe

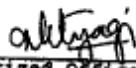
TEL: 302 478 8998

MAR. 25. 1999 5:46 PM P 5

of the State of Delaware.

FOURTH: That the capital of said corporation shall not be reduced under or by reason of said amendment.

IN WITNESS WHEREOF, said Systems Logic, Inc. has caused this certificate to be signed by ADESH KUMAR, an Authorized Officer, this 25 day of March, 1999.

By: 
Authorized Officer
Name: ADESH KUMAR
Title: CEO

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "SYSTEMS LOGIC, INC.", CHANGING ITS NAME FROM "SYSTEMS LOGIC, INC." TO "SYSTEMS AMERICA PUBLIC SECTOR, INC.", FILED IN THIS OFFICE ON THE EIGHTH DAY OF APRIL, A.D. 1999, AT 9 O`CLOCK A.M.



2596199 8100
SR# 20230123129

You may verify this certificate online at corp.delaware.gov/authver.shtml

Handwritten signature of Jeffrey W. Bullock, Secretary of State, over a horizontal line.

Jeffrey W. Bullock, Secretary of State

Authentication: 202495651
Date: 01-13-23

To: 13027393812 From: 19252712729 Date: 01/14/13 Time: 4:45 PM Page: 03/03
State of Delaware
Secretary of State
Division of Corporations
Delivered 07:45 PM 01/14/2013
FILED 07:45 PM 01/14/2013
SRV 130047904 - 2596199 FILE

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

Systems America Public Sector, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware.

DOES HEREBY CERTIFY:

FIRST: That at a meeting of the Board of Directors of Systems America Public Sector, Inc., resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:


RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "First" so that, as amended, said Article shall be and read as follows: The name of the corporation is Systems America, Inc.

SECOND: That thereafter, pursuant to resolution of its Board of Directors, a special meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

FOURTH: That the capital of said corporation shall not be reduced under or by reason of said amendment.

IN WITNESS WHEREOF, said Systems America Public Sector, Inc. has caused this certificate to be signed by Adesh Kumar Tyagi (also known as Adesh Kumar), an Authorized Officer, this 14th day of January, 2013.

By: 
Authorized Officer
Name: Adesh Kumar Tyagi
Title: CEO

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "SYSTEMS AMERICA PUBLIC SECTOR, INC.", CHANGING ITS NAME FROM "SYSTEMS AMERICA PUBLIC SECTOR, INC." TO "SYSTEMS AMERICA, INC.", FILED IN THIS OFFICE ON THE FOURTEENTH DAY OF JANUARY, A.D. 2013, AT 7:45 O`CLOCK P.M.

Handwritten signature of Jeffrey W. Bullock, Secretary of State, written in black ink over a horizontal line.

Jeffrey W. Bullock, Secretary of State

2596199 8100
SR# 20230123129

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 202495650
Date: 01-13-23

State of Delaware
Secretary of State
Division of Corporations
Delivered 02:33 PM 08/27/2018
FILED 02:33 PM 08/27/2018
SR 20184368200 - File Number 2596199

**STATE OF DELAWARE
CERTIFICATE OF AMENDMENT
OF CERTIFICATE OF INCORPORATION**

The corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware does hereby certify:

FIRST: That at a meeting of the Board of Directors of Systems America, Inc.

resolutions were duly adopted setting forth a proposed amendment of the Certificate of Incorporation of said corporation, declaring said amendment to be advisable and calling a meeting of the stockholders of said corporation for consideration thereof. The resolution setting forth the proposed amendment is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "First" so that, as amended, said Article shall be and read as follows:

The name of the corporation is Tryfacta, Inc.

SECOND: That thereafter, pursuant to resolution of its Board of Directors, a special meeting of the stockholders of said corporation was duly called and held upon notice in accordance with Section 222 of the General Corporation Law of the State of Delaware at which meeting the necessary number of shares as required by statute were voted in favor of the amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said corporation has caused this certificate to be signed this 27th day of August, 2018.

By: Ratika Tyaqi
Authorized Officer

Title: CEO

Name: Ratika Tyaqi
Print or Type

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT THE SAID "SYSTEMS LOGIC, INC." FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "SYSTEMS AMERICA PUBLIC SECTOR, INC.", ON THE EIGHTH DAY OF APRIL, A.D. 1999, AT 9 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THE SAID "SYSTEMS AMERICA PUBLIC SECTOR, INC." FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "SYSTEMS AMERICA, INC.", ON THE FOURTEENTH DAY OF JANUARY, A.D. 2013, AT 7:45 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THE SAID "SYSTEMS AMERICA, INC." FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "TRYFACTA, INC.", ON THE TWENTY-SEVENTH DAY OF AUGUST, A.D. 2018, AT 2:33 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "TRYFACTA, INC.", IS THE LAST KNOWN TITLE OF RECORD OF THE AFORESAID CORPORATION.

Handwritten signature of Jeffrey W. Bullock, Secretary of State of Delaware, over a horizontal line.

Jeffrey W. Bullock, Secretary of State

2596199 8321
SR# 20186537909

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 203387692
Date: 09-10-18

SWAM Certification (West Virginia)



ERIC L. HOUSEHOLDER
CABINET SECRETARY

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION

SAMANTHA WILLIS
PURCHASING DIRECTOR

March 24, 2026

TRYFACTA INC
4637 CHABOT DR STE 100
PLEASANTON, CA 94588

Adesh Tyagi:

This is to notify you that your Small, Women-, and Minority-Owned Businesses (SWAM) Certification Application has been approved based on your representations that TRYFACTA INC, wvOASIS vendor # VS0000037660, meets the definition of a Small, Women-, and Minority-Owned Businesses as set forth in the **West Virginia Code of State Rules 148-22-1 et seq.** This two-year certification period is now effective and will expire:

01/09/2028

This certification shall automatically expire without notice two years after the effective date unless revoked by the Purchasing Director or upon expiration pursuant to the **West Virginia Code of State Rules 148-22-8.** The type(s) of Small, Women-, and Minority-Owned Businesses (SWAM) Certification approved for your entity:

Women-Owned Business	Minority-Owned Business
----------------------	-------------------------

At the end of your two-year certification period, if you wish to reapply, please complete a WV-IA form or apply for re-certification through the Vendor Self-Service portal at wvOASIS.gov. Complete renewal instructions, application forms, and a list of West Virginia's Small, Women-, and Minority-Owned Businesses (SWAM) Certification entities are available online at www.state.wv.us/admin/purchase/VendorReg.html.

If you have questions, please contact the West Virginia Purchasing Division at 304-558-2311.

Sincerely,

Michelle Chandler
Vendor Registration Coordinator

3.2. Vendors shall be able to demonstrate their potential to provide these services by providing documentation to indicate they have provided staffing of at least six (6) individuals within the listed classifications within the past five (5) years: documentation should include enough information to indicate that the Vendor provided an employee meeting the requirements of a specifically named classification from Section I, above: the documentation should name the entity to whom the individual was supplied and provide contact information for that entity. Vendors must provide documentation to indicate that their company meets this requirement prior to award; however, bidders may include this documentation with their bid.

The following table demonstrates Tryfacta’s experience providing qualified personnel across the required classifications within the last three (3) years, with each role supported by multiple client engagements.

Sr. No.	Title	Qualification	# of Engagements (Client Names Last 3 Years)
1	Senior Mainframe Application Analyst	COBOL, JCL, z/OS, DB2, Mainframe Modernization	30+ (WVDOT, WMATA, NY State OGS, State of Michigan, BART, City of Minneapolis, State of Texas DIR, Allegheny County, City of Albuquerque, State of Louisiana)
2	Mainframe Application Analyst	COBOL, JCL, Batch Processing, Debugging	45+ (WMATA, State of Texas DIR, NY OGS, Allegheny County, BART, State of Louisiana, City of Albuquerque, County of San Diego, State of Kansas, City of Phoenix)
3	Senior Oracle Database Administrator	Oracle DB, Performance Tuning, Backup & Recovery	45+ (NY OGS, State of Texas DIR, Miami-Dade County, WMATA, County of San Diego, City of Phoenix, Port of Long Beach, State of Delaware, Sound Transit, Utah Transit Authority)
4	Application Oracle Database Administrator	Oracle DB Admin, SQL, Data Management	40+ (State of Texas DIR, State of Michigan, NY OGS, City of Albuquerque, County of San Diego, Port of Los Angeles, Sound Transit, State of Idaho, University of Arizona, City of Phoenix)
5	Senior Application DB2 Database Administrator	DB2, Performance Tuning, z/OS	30+ (State of Michigan, NY OGS, BART, State of Texas DIR, Santa Clara VTA, State of Kansas, County of San Diego, City of Phoenix, WMATA, State of Louisiana)
6	Application DB2 Database Administrator	DB2 Admin, Query Optimization	34+ (Santa Clara VTA, State of Michigan, NY OGS, County of San Diego, State of Oklahoma OMES, BART, State of Louisiana, City of Albuquerque, City of Phoenix, Sound Transit)
7	PC Programmer Analyst	.NET, Java, SQL, Application Support	40+ (City of Albuquerque, City of Minneapolis, Miami-Dade County, Allegheny County, State of Texas DIR, County of San Diego, City of Phoenix, State of Idaho, State of Kansas, WMATA)
8	Senior PC Programmer Analyst	Full Stack Dev, System Design, Integration	35+ (DFW Airport, WMATA, City of Phoenix, County of San Diego, NY OGS, State of Texas DIR, Sound Transit, Miami-Dade County, State of Michigan, City of Albuquerque)
9	Application SQL Server Database Administrator	SQL Server, SSIS, Performance Tuning	40+ (Miami-Dade County, State of Texas DIR, County of San Diego, City of Phoenix, State of Michigan, NY OGS, Port of Long Beach, BART, Sound Transit, State of Delaware)
10	Senior Application SQL Server Database Administrator	Advanced SQL, Optimization, Data Architecture	36+ (DFW Airport, State of Texas DIR, NY OGS, Miami-Dade County, WMATA, County of San Diego, City of Phoenix, State of Kansas, Sound Transit, Allegheny County)
11	GIS Database Administrator	ArcGIS, Spatial DB, Data Management	40+ (County of San Diego, Sound Transit, BART, Port of Long Beach, City of Phoenix, Utah Transit Authority, Orange County TA, State of Texas DIR, City of Albuquerque, WMATA)
12	Senior GIS Database Administrator	Enterprise GIS, Data Governance	45+ (Sound Transit, BART, County of San Diego, City of Phoenix, Port of Los Angeles, Utah Transit Authority, State of Texas DIR, Orange County TA, WMATA, State of Michigan)
13	GIS Architect	GIS Architecture, ESRI, Enterprise Design	30+ (City of Phoenix, Utah Transit Authority, Orange County TA, Port of Los Angeles, County of San Diego, State of

			Texas DIR, Sound Transit, BART, WMATA, City of Albuquerque)
14	GIS Application Developer	ArcGIS API, Web GIS, Integration	45+ (BART, Sound Transit, County of San Diego, City of Phoenix, Port of Long Beach, Utah Transit Authority, Orange County TA, City of Albuquerque, WMATA, State of Texas DIR)
15	Senior GIS Application Developer	Advanced GIS Dev, System Integration	30+ (BART, Sound Transit, County of San Diego, Port of Los Angeles, Utah Transit Authority, City of Phoenix, WMATA, Orange County TA, State of Texas DIR, City of Albuquerque)


- Agile Staffing Adjustments:** Tryfacta leverages an AI-enabled staffing platform (JobDiva) that supports 10,000+ concurrent requisitions and manages workforce operations for 4,500+ employees, including timekeeping, payroll, invoicing, and performance tracking. Our infrastructure supports 15,000+ biweekly payroll transactions and multi-million-dollar IT staffing programs. This system-driven approach ensures scalability, speed, and compliance, enabling Tryfacta to meet both steady-state and surge IT staffing demands without compromising quality or delivery timelines. Our recruitment processes are aligned with ISO 9001:2015 quality standards and ISO 27001 information security controls.
- Scalable Staffing Infrastructure:** Our service model supports both small-scale specialized IT staffing and enterprise-wide, multi-department staffing programs. Tryfacta manages contract portfolios exceeding \$250M+ and maintains annual revenues of \$57M+, demonstrating strong financial and operational scalability. Our Microsoft Dynamics-based systems support large public-sector contracts and high-volume payroll processing.
- Financial Stability & Capacity:** Tryfacta maintains a strong D&B profile, approximately \$10M in available credit, and stable banking relationships with no long-term debt obligations. This ensures uninterrupted payroll processing, timely consultant payments, and operational continuity across all IT staffing engagements.
- Candidate Pools & Workforce Readiness:** Tryfacta maintains a mature staffing infrastructure with 4,500+ active employees nationwide and a centralized ATS (JobDiva) managing candidate pipelines, onboarding, invoicing, and performance tracking. Our system enables seamless scaling without disrupting ongoing assignments and ensures continuous workforce readiness for IT roles.
- Timely Delivery & Pipeline Readiness:** Tryfacta leverages historical placement data, active consultant bench, and continuous sourcing strategies to ensure rapid delivery. Qualified IT candidates are typically submitted within 24 hours, with an emergency deployment capability of 4–6 hours for critical roles. Our proactive pipeline includes pre-vetted professionals across high-demand IT domains such as infrastructure, cybersecurity, data, GIS, and enterprise systems.
- Regional & National Coverage:** Tryfacta’s delivery model combines strong regional presence with a nationwide sourcing network, ensuring consistent candidate availability without restarting recruitment cycles. Our “on-bench” consultants are pre-screened and ready for immediate deployment, while our broader resume pool enables rapid mobilization for specialized IT roles across departments.

Job Title	On Bench (WV)	On Bench (US)	Resume Pool (WV)	Resume Pool (US)
Senior Mainframe Application Analyst	10+	80+	200+	8,000+
Mainframe Application Analyst	12+	100+	250+	10,000+
Senior Application Oracle Database Administrator	15+	140+	400+	18,000+
Application Oracle Database Administrator	20+	180+	500+	22,000+
Senior Application DB2 Database Administrator	10+	90+	220+	9,000+
Application DB2 Database Administrator	12+	120+	300+	12,000+
PC Programmer Analyst	30+	300+	800+	35,000+
Senior PC Programmer Analyst	25+	250+	700+	30,000+
Application SQL Server Database Administrator	28+	260+	750+	32,000+

Senior Application SQL Server Database Administrator	20+	200+	600+	26,000+
GIS Database Administrator	18+	180+	500+	22,000+
Senior GIS Database Administrator	15+	150+	420+	18,000+
GIS Architect	10+	120+	300+	14,000+
GIS Application Developer	22+	220+	650+	28,000+
Senior GIS Application Developer	18+	180+	550+	24,000+


Each engagement listed below represents the deployment of one or more qualified IT professionals within the specified classification. Collectively, these engagements demonstrate that Tryfacta has consistently provided well in excess of six (6) individuals per classification within the past five (5) years, fully satisfying Section 3.2 requirements. The following case studies provide representative examples demonstrating delivery of qualified personnel across the required classifications, including client references and contact information, in accordance with Section 3.2 documentation requirements.

Case Study #1

Client Name	National Labor Relations Board (NLRB)	
Client Address	Washington, DC	
POC Details	Contact Name: Digvijay Dond Contact Title: Contracts Manager Phone Number: 816-446-3653 Email: Digvijay.dond@nlrb.gov	
Duration	October 1, 2024 – September 30, 2029	
Budget	\$12M+	
Project Description	The National Labor Relations Board (NLRB) is a federal agency responsible for enforcing U.S. labor laws and managing complex case management, legal, and operational systems across multiple regions. NLRB required a qualified IT staffing partner to support its enterprise applications, legacy systems, database infrastructure, and cybersecurity operations, while ensuring uninterrupted service delivery across mission-critical environments. The agency sought a vendor capable of rapidly delivering highly specialized IT professionals across multiple classifications, including database administrators, application developers, GIS specialists, and mainframe support resources, while maintaining strict federal compliance, security, and performance standards. Supported federal enterprise systems used across multiple regional offices, ensuring uninterrupted operations for mission-critical labor case management systems.	
Tryfacta's Solution & Approach	Tryfacta implemented a centralized delivery model through its Client Engagement & Delivery Office (CEDO), supported by a dedicated Account Manager and a multi-disciplinary recruitment team. Leveraging its AI-enabled ATS (JobDiva) and a nationwide talent network, Tryfacta established a proactive staffing pipeline aligned to NLRB's technical requirements. Our approach included: <ul style="list-style-type: none"> • Rapid requisition intake and role alignment with federal IT classifications • Pre-screening, technical validation, and background verification of candidates • Deployment of resources across multiple locations and technical domains • Continuous workforce monitoring, performance tracking, and replacement readiness Tryfacta maintained a 24–48 hour candidate submission cycle, ensuring minimal disruption to operations and rapid fulfillment of staffing needs.	
Scope of Services & Roles Delivered	Tryfacta provided 20+ IT professionals across multiple classifications aligned with Section 4.1 requirements, including: <ul style="list-style-type: none"> • Senior Mainframe Application Analyst / Mainframe Application Analyst – Supported COBOL-based legacy systems, batch processing, and system modernization initiatives • Senior Application Oracle Database Administrator: Managed enterprise Oracle environments, including performance tuning, backup/recovery strategies, and high availability configurations • Application Oracle Database Administrator: Provided day-to-day database administration, SQL optimization, and data integrity support • Senior & Application DB2 Database Administrators – Provided DB2 optimization, maintenance, and system-level database management 	


Key Outcomes & Results	<ul style="list-style-type: none"> • Successfully deployed and managed 20+ IT professionals across critical technical domains • Demonstrated ability to provide more than six (6) resources per classification across engagements, satisfying Section 3.2 requirements • Reduced time-to-fill through 24 hours candidate submission timelines • Ensured high system availability and performance across enterprise platforms • Strengthened database performance, application stability, and cybersecurity posture • Enabled seamless continuity of operations across distributed federal systems
Relevance to Current Requirement	This engagement demonstrates Tryfacta's proven capability to provide qualified personnel across all required IT classifications, with staffing volumes exceeding the minimum requirement of six (6) individuals within the past five (5) years. The roles delivered directly align with the classifications outlined in Section 4.1, including database administration, application development, mainframe systems, and GIS services.

Case Study #2

Client Name	Sound Transit	
Client Address	Seattle, WA	
POC Details	Contact Name: Megan Mollman Webber Contact Title: IT Acquisition & Contracts Partner – Contracted Workforce Phone Number: 206-665-8742 Email: megan.mollmanwebber@soundtransit.org	
Scope	Information Technology Temporary Contractor Services	
Duration	September 2023 – Present	
Budget	\$12M+	
Project Description	<p>Sound Transit operates one of the largest regional transit systems in the Pacific Northwest, supporting light rail, commuter rail, and bus rapid transit services. The agency manages a highly distributed IT environment that supports real-time transit operations, infrastructure planning, GIS-based asset tracking, and customer information systems. Due to ongoing expansion programs and capital projects, Sound Transit required a staffing partner capable of supporting multiple parallel IT initiatives, including system upgrades, data integration, and operational system support. The requirement emphasized role-specific technical expertise, program-level coordination, and the ability to scale resources dynamically based on project phases and funding cycles. Supported large-scale transit infrastructure programs and real-time operational systems, enabling data-driven planning and system coordination across expanding transportation networks.</p>	
Tryfacta's Solution & Approach	<p>For this engagement, Tryfacta implemented a program-based staffing model, designed specifically for transportation environments where multiple IT workstreams operate simultaneously. Instead of a traditional reactive model, Tryfacta established:</p> <ul style="list-style-type: none"> • A cluster-based recruiting approach, where dedicated recruiters were aligned to specific technology tracks (GIS, databases, applications, infrastructure) • A rolling pipeline model, maintaining pre-qualified candidates ready for anticipated project phases • A two-tier screening process, combining technical validation with domain-specific evaluation (e.g., transit systems, GIS platforms) • A deployment readiness framework, ensuring candidates could be onboarded and integrated into active projects with minimal ramp-up time <p>This approach allowed Tryfacta to support both planned project staffing and unplanned operational needs without delays.</p>	
Scope of Services &	Tryfacta provided a diverse set of IT professionals aligned with transportation system requirements, including:	

<p>Roles Delivered</p>	<ul style="list-style-type: none"> • Senior & Application SQL Server / Oracle Database Administrators – Managed large-scale operational databases supporting transit scheduling, asset tracking, and reporting systems • DB2 Database Administrators – Supported legacy data environments and system integrations with newer platforms • PC Programmer Analysts (Mid & Senior Level) – Developed and enhanced applications supporting fare systems, reporting tools, and internal operations • GIS Architects & GIS Application Developers – Designed and implemented GIS-based solutions for route planning, infrastructure mapping, and spatial analytics • GIS Database Administrators – Maintained spatial data environments and ensured data accuracy across mapping systems • Mainframe Application Analysts – Supported legacy system dependencies and integration with modern platforms <p>All roles were aligned with defined technical classifications and supported both operational systems and long-term capital projects.</p>
<p>Relevance to Current Requirement</p>	<p>This engagement demonstrates Tryfacta’s ability to deliver qualified IT professionals across multiple classifications in a complex, transportation-focused environment. The roles provided align directly with required classifications, including database administration, application development, GIS services, and system support. The breadth of staffing delivered across concurrent initiatives reflects Tryfacta’s capability to provide multiple qualified individuals within each classification over recent engagements, fully aligning with the expectations outlined in Section 3.2.</p>

Case Study #3

<p>Client Name</p>	<p>State of Maryland Department of General Services (DGS)</p>	
<p>POC Details</p>	<p>Contact Name: Rebekah Judah Contact Title: Director, Vendor & Resource Management Phone Number: (443) 517-0107 Email: rebekah.judah@maryland.gov</p>	
<p>Scope</p>	<p>Statewide Agile Resources and Teams</p>	
<p>Duration</p>	<p>January 5, 2025 – February 28, 2035</p>	
<p>Budget</p>	<p>\$15M+</p>	
<p>Project Description</p>	<p>The Maryland Department of General Services (DGS) supports a wide range of state agencies by managing procurement, facilities, and enterprise technology initiatives. As part of its modernization efforts, DGS required a staffing partner capable of supporting large-scale application development, system integration, data processing, and digital service delivery initiatives. The engagement required highly skilled IT professionals to support full-stack application development, data integration platforms, user experience design, and DevOps-driven deployment pipelines, while ensuring alignment with state IT governance standards and evolving program requirements. The environment demanded a vendor capable of managing multi-role staffing across concurrent development streams, supporting both new system development and ongoing enhancements. Supported statewide eligibility and enrollment systems impacting multiple agencies and high-volume user environments, requiring consistent performance and long-term system stability.</p>	
<p>Tryfacta’s Solution & Approach</p>	<p>Tryfacta delivered a multi-layered staffing model tailored to support agile development environments</p>	

	<ul style="list-style-type: none"> Pod-based resource deployment, aligning developers, QA, and DevOps professionals into functional delivery units Skill-aligned recruitment pipelines, ensuring rapid availability of role-specific talent across frontend, backend, data, and infrastructure domains Continuous engagement model, supporting both steady-state operations and enhancement-driven releases: Integration with processes for change management, sprint planning, and release cycles This model enabled Tryfacta to support simultaneous development initiatives, while maintaining consistency in delivery quality and resource performance.
<p>Scope of Services & Roles Delivered</p>	<p>Tryfacta provided qualified IT professionals across the required classifications to support enterprise application systems, database environments, legacy platforms, and GIS-based solutions. The following roles were delivered under this engagement:</p> <ul style="list-style-type: none"> Senior Mainframe Application Analyst: Led modernization and support of legacy mainframe systems, including COBOL-based applications, batch processing, and system optimization Mainframe Application Analyst: Supported daily operations of mainframe environments, including job control (JCL), debugging, and system maintenance Senior Application DB2 Database Administrator: Performed DB2 performance tuning, query optimization, and system-level database management Application DB2 Database Administrator: Supported DB2 database maintenance, monitoring, and issue resolution Application SQL Server Database Administrator: Managed SQL Server databases, including ETL processes, reporting support, and performance tuning Senior Application SQL Server Database Administrator: Led database architecture design, large dataset optimization, and enterprise data solutions PC Programmer Analyst: Developed, tested, and maintained application systems, supporting business logic implementation and defect resolution Senior PC Programmer Analyst: Led application development efforts, system integration, and technical design across enterprise platforms GIS Database Administrator: Managed spatial databases, ensuring accuracy, performance, and integration of GIS data systems GIS Application Developer: Developed GIS-based applications using ArcGIS APIs and supported system integrations Senior GIS Application Developer: Led advanced GIS development, spatial analytics, and enterprise-level application integration Senior & Application Oracle Database Administrators: Managed enterprise Oracle environments, including performance tuning, high availability, and large-scale data operations.
<p>Key Outcomes & Results</p>	<ul style="list-style-type: none"> Successfully deployed and managed 40+ IT professionals across critical technical domains Successfully supporting enterprise application systems, database environments, mainframe platforms, and GIS solutions through the deployment of qualified IT professionals across all required classifications Ensuring high system availability, data integrity, and application performance across mission-critical environments Strengthening database operations (Oracle, DB2, SQL Server) through performance tuning, optimization, and proactive maintenance Supporting legacy system continuity and modernization efforts through mainframe expertise and integration support; Enhancing GIS capabilities, enabling accurate spatial data management, system integration, and advanced analytics Maintaining consistent staffing continuity and workforce stability, minimizing disruption across long-term engagements Delivering responsive staffing support, ensuring timely fulfillment of requirements and alignment with project and operational needs
<p>Relevance to Current Requirement</p>	<p>This engagement demonstrates Tryfacta's proven capability to provide qualified IT professionals across all required classifications outlined in Section 4.1, including mainframe systems, Oracle/DB2/SQL Server database administration, application development (PC Programmer Analysts), and GIS services. The breadth and depth of roles delivered under this engagement reflect Tryfacta's ability to support multiple qualified individuals within each classification, consistent with the requirements of Section 3.2. All personnel provided met the required qualifications, technical competencies, and experience levels aligned with their respective roles. Furthermore, the successful delivery of services across complex, multi-system environments highlights Tryfacta's ability to support</p>

large-scale, compliance-driven IT staffing programs, ensuring continuity of operations, system reliability, and alignment with public-sector requirements.

Response to Section 4. Mandatory Requirements

Response to 4.1 Mandatory Contract Services Requirements and Deliverables

Contract Services must meet or exceed the mandatory requirements listed below.

Tryfacta confirms that all Contract Services proposed under this RFQ will **meet or exceed the mandatory requirements** specified in Section 4.1 for each position classification. To demonstrate our capability and alignment with the State’s requirements, Tryfacta is submitting **representative resumes for one (1) candidate per classification**. These sample profiles are provided solely to illustrate our ability to source, screen, and deploy qualified professionals who meet or exceed the required qualifications. Our staffing infrastructure includes:

- **4,500+ active employees nationwide**
- **110+ recruiters and sourcing specialists** operating in a 24/7 model
- **5.5M+ pre-screened candidate database**, including a strong regional pool aligned to WVDOT requirements
- Proven ability to deliver **1,600+ government placements annually**
- Nationwide presence across all 50 states with strong regional coverage
- Pre-qualified talent pools across all listed classifications including Mainframe, Database Administration (Oracle, DB2, SQL Server), GIS, and Application Development roles.

Tryfacta maintains a robust pipeline of qualified IT professionals and can rapidly deploy resources using both internal talent pools and external sourcing channels. In urgent scenarios, qualified personnel can be deployed **within the same day**, depending on role availability. Additionally, Tryfacta maintains an extensive network of **partner firms and supplier relationships**, enabling access to specialized skill sets and scalable staffing support for complex or high-volume requirements.

Skill Matrix & Qualification Mapping:

Name / Title	Mandatory Requirements (As per Section 4.1)	Candidate Qualification / Experience (To be Filled)
Larry McClain Senior Mainframe Application Analyst	<ul style="list-style-type: none"> • Bachelor’s Degree or equivalent experience • 5+ years COBOL, CICS, JCL • 5+ years Relational Database experience • 5+ years Analysis & Design • 3+ years in Senior/Lead role • Strong communication skills 	<ul style="list-style-type: none"> • Holds B.S. in Computer Science and M.A. in Mathematics, exceeding educational requirements • Possesses 20+ years of experience in mainframe application support using COBOL, JCL, Natural, Adabas, and IBM z/OS, significantly exceeding the 5+ years requirement • Extensive experience with relational databases including Oracle, DB2, SQL Server, and PL/SQL, meeting and exceeding database requirements • Demonstrated strong analysis, system design, and modernization experience, including reverse engineering legacy systems and mapping to modern architectures • Over 10+ years in senior/lead roles, including Senior Consultant, Senior Mainframe Programmer, and Deputy Program Manager, leading teams of 35+ technical staff • Proven expertise in batch processing, production support, debugging, and system optimization in high-demand federal environments (USMC systems) • Strong communication and stakeholder collaboration skills, with experience working across cross-functional teams and supporting federal/DoD clients • Experience supporting mission-critical systems, ensuring high availability, performance, and compliance with federal standards; holds Active Secret Clearance
Cassandra Harris Mainframe Application Analyst	<ul style="list-style-type: none"> • 3+ years COBOL, CICS, JCL • 3+ years Relational Database experience • 3+ years Analysis & Design • Strong communication skills 	<ul style="list-style-type: none"> • Holds M.S. in Information Systems Management and B.S. in Business Management, exceeding educational expectations • Possesses 10+ years of hands-on experience in mainframe application development using COBOL, CICS, and JCL, significantly exceeding the 3+ years requirement • Extensive experience with relational databases including DB2, SQL, VSAM, and Oracle, meeting and exceeding database requirements

		<ul style="list-style-type: none"> • Demonstrated strong analysis and design capabilities, including gathering business requirements, preparing technical specifications, and contributing to system architecture and high-level design documents across multiple enterprise environments • Proven experience across the full Software Development Life Cycle (SDLC), including development, testing, deployment, and production support for mission-critical systems • Extensive experience supporting enterprise-scale applications in industries including telecommunications (AT&T),
<p>John Mosco Senior</p>	<ul style="list-style-type: none"> • 10+ years Oracle DB administration • Bachelor's or equivalent • 5+ years PL/SQL debugging & tuning • 5+ years SQL optimization • 5+ years experience • Oracle Warehouse Builder (2+ years) • Fine grain access control (2+ 	<ul style="list-style-type: none"> • Holds B.S. in Information Technology and MBA in Information • Possesses 20+ years of experience in Oracle Database Administration, significantly exceeding the 10+ years requirement, supporting enterprise and mission-critical DoD environments • Demonstrates extensive PL/SQL debugging, development, and performance tuning experience, including optimization of procedures, tools such as Oracle Enterprise Manager (OEM) and AWR reports to enhance database efficiency and database maintenance • Demonstrated expertise in data modeling, database design, and enterprise data architecture, supporting scalable and high-availability systems • Extensive hands-on experience with RMAN-based backup, recovery, and disaster recovery strategies, including database cloning and high-availability configurations (Data Guard–aligned architectures) • Proven experience implementing Fine-Grained Access Control (FGAC/VPD), database security policies, auditing, and encryption in compliance with DISA STIG and DoD RMF frameworks • Experience supporting data integration and ETL processes, aligning with Oracle data warehousing environments • Provides 24x7 operational support, capacity planning, and system monitoring for enterprise environments, ensuring high availability, performance, and compliance
<p>Qin Li Application Oracle DBA</p>	<ul style="list-style-type: none"> • 5+ years Oracle DB administration • Bachelor's or equivalent • 2+ years connectivity & PL/SQL support • 2+ years SQL optimization • 2+ years UNIX/Linux scripting • RMAN backup experience 	<ul style="list-style-type: none"> • Holds B.S. in Computer Science along with advanced degrees including MS (Computer Information Systems), MBA (Finance), and Doctorate-level studies in IT, significantly exceeding educational requirements • Possesses 23+ years of experience in Oracle database administration, development, and data architecture, far exceeding the 5+ years requirement across federal and enterprise environments • Demonstrates strong expertise in PL/SQL development, debugging, and database connectivity support, including development of procedures, triggers, functions, and packages, supporting application teams in enterprise systems • Extensive experience in SQL optimization and performance tuning, improving efficiency of complex queries and enterprise data systems • Proven experience working in UNIX/Linux environments, including scripting, automation, and system-level database support • Hands-on experience implementing backup, recovery, and disaster recovery strategies aligned with Oracle RMAN practices, ensuring high availability and data integrity • Strong background in data modeling, ETL processes, and data warehousing, supporting large-scale enterprise and federal systems • Experience implementing role-based and fine-grained access controls, database security, and compliance in secure DoD environments

		<ul style="list-style-type: none"> • Demonstrated ability to support multi-platform environments (Oracle, SQL Server, PostgreSQL, cloud platforms), ensuring system performance, integration, and scalability
Praveen Kumar Varatharaj Senior Application DB2 DBA	<ul style="list-style-type: none"> • 5+ years DB2 administration • Bachelor's or equivalent • 5+ years permissions management • 5+ years debugging & SQL optimization • 5+ years Data Modeling • Disaster recovery experience • Strong communication skills 	<ul style="list-style-type: none"> • Holds Bachelor of Engineering (B.E.), meeting educational requirements • Possesses 13+ years of hands-on experience in DB2 database administration, significantly exceeding the 5+ years requirement in enterprise mainframe environments • Extensive experience in DB2 system administration, including database object creation, structural changes, tablespace conversions, and version upgrades (v11 → v12 → v13) • Demonstrated expertise in permissions management and database security, including user access control, auditing, and compliance across enterprise systems • Strong experience in debugging, SQL optimization, and performance tuning, utilizing tools such as Explain, Index Advisor, Buffer Pools, BMC Mainview, and Apptune to improve system performance • Proven capabilities in data modeling and database design, including schema management, ERD alignment, and large-scale data structure optimization • Hands-on experience with disaster recovery planning and execution, including DR drills, high availability support, replication (Q-Replication, CDC), and backup/recovery strategies ensuring data integrity • Extensive experience supporting 24x7 production environments, including monitoring, troubleshooting, and resolving critical issues in real-time • Strong communication and collaboration skills, working with cross-functional teams including developers, analysts, and stakeholders to deliver high-quality database solutions
Luke Chen Application DB2 DBA	<ul style="list-style-type: none"> • 4+ years DB2 administration • Bachelor's or equivalent • 3+ years permissions management • 3+ years debugging & SQL optimization • 3+ years Data Modeling • Disaster recovery experience 	<ul style="list-style-type: none"> • Holds a Bachelor's degree and multiple IBM DB2 certifications, meeting and exceeding the educational requirement. • Possesses 15+ years of DB2 database administration experience across z/OS, AIX, Linux, and Windows platforms, significantly exceeding the required 4+ years. • Demonstrates strong experience in DB2 security and permissions management, including role-based access controls, data integrity, auditing, and secure access management for enterprise environments. • Has extensive hands-on experience debugging and optimizing stored procedures, triggers, functions, packages, and high-volume SQL workloads, exceeding the required 3+ years in debugging and SQL optimization. • Brings proven expertise in logical and physical data modeling for both transactional systems and enterprise data warehouses, clearly meeting the 3+ years data modeling requirement. • Has strong disaster recovery, backup, and recovery experience, including high-availability operations, business continuity support, migration, and recovery planning across mission-critical systems. • Supported the full SDLC and collaborated closely with developers, analysts, and business stakeholders, demonstrating strong cross-functional communication and enterprise support capability. • Additional strengths include ETL/integration, scripting (Perl, Python, Shell, JCL, REXX), performance tuning, capacity planning, and large-scale data warehouse support, further enhancing alignment with the role.
Nagul Shaik Senior Application SQL Server DBA	<ul style="list-style-type: none"> • 10+ years SQL Server administration • Bachelor's or equivalent • 5+ years connectivity & T-SQL debugging • 5+ years SQL optimization • 5+ years UNIX/Linux scripting • 5+ years 	<ul style="list-style-type: none"> • Holds a Bachelor of Technology in Electronics and Communications Engineering, meeting the educational requirement. • Possesses 14+ years of hands-on experience in SQL Server database administration, architecture, and enterprise data environments, exceeding the required 10+ years. • Demonstrates strong experience in SQL Server connectivity, T-SQL development, debugging, and optimization, including stored

	<p>Data Modeling • Backup & recovery experience • Data warehouse experience • Fine grain access control</p>	<p>procedures, triggers, functions, ETL validations, and enterprise query tuning.</p> <ul style="list-style-type: none"> • Has extensive experience in SQL optimization and performance improvement across OLTP, OLAP, and enterprise data warehouse environments, including use of SSMS, SSIS, Azure SQL, and Azure Synapse Analytics. • Brings 5+ years of data modeling experience, including conceptual, logical, and physical data modeling using Erwin, DbSchema, ER/Studio, SAP Power Designer, and Infosphere Data Architect, supporting both relational and dimensional models. • Demonstrates solid experience in backup, recovery, and enterprise data warehouse support, including database deployments across Dev, Stage, UAT, and Production environments, as well as validation, migration, and high-volume ETL processing. • Has strong experience in data warehouse architecture and design, including Star Schema, Snowflake Schema, Kimball, Inmon, Data Vault, SCD, CDC, MDM, and Azure Synapse/SQL DW environments. • Experienced working in UNIX and Linux environments, with database support, scripting exposure, and enterprise application integration across heterogeneous platforms. • Demonstrates capabilities in data governance, security, and fine-grained access control, including metadata management, data stewardship, HIPAA-sensitive healthcare data environments, and secure enterprise data access. • Possesses excellent verbal and written communication skills, with extensive experience working directly with project managers, architects, SMEs, developers, business users, and technical teams in complex public-sector and healthcare environments.
<p>Chandra Shekar Application SQL Server DBA</p>	<ul style="list-style-type: none"> • 5+ years SQL Server administration • Bachelor's or equivalent • 2+ years connectivity & debugging • 2+ years SQL optimization • 2+ years UNIX/Linux scripting • Backup & recovery experience 	<ul style="list-style-type: none"> • Holds a B.S. in Computer Science and M.S. in Computer Science, exceeding the educational requirement. • Possesses 18+ years of experience managing and supporting enterprise SQL Server environments, significantly exceeding the required 5+ years. • Demonstrates strong experience in database connectivity, integration, and application support, enabling reliable interaction between SQL Server platforms and complex enterprise applications. • Has extensive experience supporting development teams through debugging and optimizing T-SQL code, including stored procedures, triggers, functions, schema optimization, and indexing improvements, exceeding the required 2+ years. • Brings strong expertise in SQL optimization and performance tuning, improving query execution and overall system performance in high-volume, mission-critical environments. • Has hands-on experience working in UNIX/Linux environments including RHEL, CentOS, and Solaris, with Bash scripting and automation for monitoring, maintenance, and reporting, exceeding the required 2+ years. • Demonstrates extensive knowledge of backup and recovery strategies, disaster recovery planning, and high-availability solutions, including automated failover, HA/DR architecture, RMAN pipelines, and enterprise recovery operations. • Additional strengths include cloud database administration, security hardening, RBAC, encryption, auditing, and enterprise storage architecture, further supporting alignment with mission-critical SQL Server environments.
<p>Samuel Apau PC Programmer Analyst</p>	<ul style="list-style-type: none"> • Bachelor's or equivalent experience • 3+ years database management • 3+ years system development & maintenance • Strong 	<ul style="list-style-type: none"> • Holds a Master of Science in Software Development and a Bachelor of Science, exceeding the educational requirement. • Possesses 14+ years of experience in software engineering, system development, and enterprise application support, exceeding the required 3+ years.

	<p>analytical & communication skills</p>	<ul style="list-style-type: none"> • Demonstrates strong expertise in database management, working extensively with Azure SQL, PostgreSQL, MongoDB, Cosmos DB, and other relational and NoSQL databases, exceeding the required 3+ years. • Has extensive experience in system development, maintenance, and enhancement, including designing, developing, and optimizing enterprise applications using .NET, Java, Python, Node.js, and microservices architectures, exceeding the required 3+ years. • Brings strong capabilities in systems analysis, requirements gathering, and technical design, including developing work plans, documentation, and scalable solutions aligned with business objectives. • Demonstrates hands-on experience in performance tuning, debugging, and production support, ensuring system stability, reliability, and high performance in enterprise environments. • Possesses excellent analytical and communication skills, with proven experience collaborating with project managers, business analysts, developers, DevOps teams, and stakeholders to deliver complex IT solutions. • Additional strengths include API-driven architectures, cloud-based systems (Azure/AWS), DevSecOps, CI/CD automation, and modern application frameworks, further enhancing alignment with PC Programmer Analyst responsibilities.
<p>Arkady Vilpan Senior PC Programmer Analyst</p>	<ul style="list-style-type: none"> • Bachelor's or equivalent experience • 5+ years database & system development • 5+ years complex system analysis • Strong communication skills 	<ul style="list-style-type: none"> • Holds multiple advanced degrees including M.S. in Banking and Finance and M.S. in Mechanical Engineering, along with formal programming training, meeting and exceeding educational requirements. • Possesses 20+ years of experience in enterprise application development, database systems, and large-scale system support, significantly exceeding the required 5+ years. • Demonstrates extensive experience in database development and system design, working with SQL Server, Oracle, PostgreSQL, and enterprise data platforms, supporting complex, mission-critical systems. • Brings strong expertise in complex system analysis, design, and modernization, including requirements gathering, architecture design, application development, testing, deployment, and production support across full SDLC. • Has proven experience in developing and supporting enterprise-level applications using C#, .NET Core, ASP.NET, APIs, and microservices architectures, including modernization of legacy systems within federal environments. • Demonstrates strong capabilities in system optimization, debugging, performance tuning, and production support, ensuring high availability and reliability of applications. • Possesses extensive experience in technical documentation, user manuals, system specifications, and stakeholder communication, supporting both technical and business teams. • Brings strong communication and leadership skills, including mentoring junior developers, interfacing with stakeholders, and supporting mission-critical federal programs such as DCSA and the Department of Veterans Affairs. • Additional strengths include cloud platforms (AWS/Azure), CI/CD pipelines, security remediation (ATO support), API development, and enterprise system integration, further aligning with Senior PC Programmer Analyst responsibilities.
<p>Israel Ropo Orimoloye GIS Database Administrator</p>	<ul style="list-style-type: none"> • 3+ years GIS DB administration (ArcGIS, ArcSDE, etc.) • Bachelor's or equivalent • 2+ years GIS connectivity & integration • 2+ 	<ul style="list-style-type: none"> • Holds advanced academic qualifications including Ph.D. and M.Sc. in GIS/Geography, exceeding the minimum Bachelor's requirement. • Possesses 5+ years of experience in GIS database administration, including hands-on management of ArcGIS Enterprise, ArcSDE, SQL

	<p>years debugging & spatial SQL optimization • Backup & replication experience</p>	<p>Server, and Oracle Spatial environments, exceeding required experience.</p> <ul style="list-style-type: none"> • Demonstrates strong expertise in enterprise geodatabase administration, including user management, schema design, versioning, and multi-user GIS environments. • Brings over 3+ years of experience in GIS connectivity and integration, enabling seamless interaction between GIS platforms and enterprise database systems. • Proven experience in debugging geospatial workflows and optimizing spatial SQL queries, including indexing strategies (R-tree, spatial indexing) to improve system performance. • Hands-on experience in backup, replication, and disaster recovery support, including database synchronization and restoration processes for GIS systems. • Demonstrates strong capability in data validation, QA/QC processes, and spatial data integrity management, supporting large-scale geospatial datasets. • Extensive experience supporting GIS analysts and developers through ArcPy scripting, workflow automation, and troubleshooting of geoprocessing tasks. • Strong communication and stakeholder coordination skills, with experience supporting government and enterprise GIS environments including county and academic institutions.
<p>Mary Meraz Senior GIS Database Administrator</p>	<ul style="list-style-type: none"> • 7+ years GIS DB administration • Bachelor's or equivalent (Master's preferred) • 3+ years enterprise GIS integration • 3+ years debugging & optimization • 3+ years backup & disaster recovery planning 	<ul style="list-style-type: none"> • Holds a Bachelor of Arts in Environmental Science and a Master's Certificate Program in GIST, meeting the educational requirement and aligning with the preferred advanced qualification. • Possesses 15+ years of experience managing and supporting enterprise geospatial systems, significantly exceeding the required 7+ years in GIS database administration. • Demonstrates strong expertise in ArcGIS Enterprise, ArcSDE, ArcGIS Server, ArcGIS Online, SQL Server-based geodatabases, ArcGIS Data Store, and enterprise geodatabase environments, including multi-user administration, tuning, maintenance, and scalability planning. • Brings 3+ years of enterprise GIS integration experience, including connectivity between GIS platforms and enterprise databases, configuration of WMS/WFS/Vector Tile Services, REST-enabled integrations, and support for web-based GIS applications and operational systems. • Has extensive experience in debugging and optimizing GIS database environments, including troubleshooting geoprocessing workflows, spatial queries, Python/SQL automation scripts, indexing, metadata automation, schema management, and QA/QC processes to improve performance and reliability. • Demonstrates hands-on experience in backup, replication, failover configuration, disaster recovery planning, and backup validation procedures, supporting business continuity for enterprise GIS systems. • Has managed user access, roles, permissions, ArcServer/ArcSDE administration, patches, archives, backups, and troubleshooting across government, utility, transportation, and environmental GIS environments. • Possesses strong leadership and communication skills, with experience mentoring staff, supporting enterprise GIS initiatives, coordinating with end users and stakeholders, and delivering scalable, high-quality geospatial solutions.
<p>Naresh Aligeti GIS Architect</p>	<ul style="list-style-type: none"> • 10+ years GIS architecture experience • Bachelor's or equivalent (Master's preferred) • 5+ years enterprise architecture design • 5+ years leadership & governance • 	<ul style="list-style-type: none"> • Holds a Bachelor of Engineering and a Master of Science in Environmental Geography & GIS, meeting the educational requirement and aligning with the preferred master's qualification. • Possesses 16+ years of progressive GIS experience, including extensive work designing, implementing, and managing enterprise-

	<p>Performance optimization & cloud experience • Disaster recovery planning • GIS modernization experience</p>	<p>scale GIS systems, exceeding the required 10+ years of GIS architecture experience.</p> <ul style="list-style-type: none"> • Demonstrates 5+ years of enterprise architecture design experience, developing enterprise GIS architecture models, UML diagrams, technology roadmaps, governance frameworks, and solution blueprints for large transportation and utility organizations. • Brings strong leadership and governance experience, including establishing GIS standards, architecture governance, quality assurance frameworks, best practices, compliance processes, and mentoring GIS developers, analysts, and administrators across enterprise teams. • Has significant experience in performance optimization and cloud architecture, including ArcGIS Enterprise deployments on AWS, Azure, Kubernetes, serverless platforms, and hybrid/multi-cloud environments, with focus on scalability, high availability, and operational efficiency. • Demonstrates proven expertise in disaster recovery planning and business continuity, including cloud migration strategies, backup and failover solutions, DR architecture, and resilient enterprise GIS infrastructure design. • Has led multiple GIS modernization initiatives, including migration of on-premise GIS infrastructure to cloud-native and hybrid environments, implementation of enterprise integration frameworks, and development of long-term digital transformation strategies. • Brings strong experience integrating GIS platforms with enterprise systems such as SAP, Maximo, ServiceNow, and asset management platforms, enabling seamless enterprise geospatial data exchange. • Possesses excellent communication and stakeholder engagement skills, regularly collaborating with business leaders, IT architects, engineering teams, product managers, and operational stakeholders to deliver scalable geospatial solutions aligned with organizational goals.
<p>Mariano Manzano III GIS Application Developer</p>	<ul style="list-style-type: none"> • 5+ years GIS application development • Bachelor's or equivalent • 2+ years JavaScript, Python, .NET • 2+ years DB integration • 2+ years debugging & performance optimization • Version control & Agile experience 	<ul style="list-style-type: none"> • Holds a Bachelor's degree in Computer/Information Technology and is currently pursuing a Master's in GIS, meeting and exceeding the educational requirements. • Possesses 10+ years of experience in GIS application development, significantly exceeding the required 5+ years, with strong focus on enterprise GIS solutions. • Demonstrates 2+ years (extensive) experience in JavaScript and Python, including hands-on development using ArcGIS API for JavaScript, React, HTML, CSS, and Python for geoprocessing and automation. • Has strong experience in database integration, working with SQL Server, Oracle, MS Access, and ArcSDE geodatabases, ensuring efficient spatial data management and system performance. • Proven ability in debugging, troubleshooting, and optimizing GIS applications and geoprocessing workflows, including performance tuning of map services, application enhancements, and resolving spatial data issues. • Extensive hands-on experience in developing web-based GIS applications using ArcGIS Experience Builder, Web AppBuilder, and ArcGIS Maps SDK for JavaScript, supporting enterprise and public-facing systems. • Demonstrates strong experience working in Agile environments, participating in sprint planning, backlog refinement, testing, and deployment cycles. • Proficient in version control and modern development tools, including Visual Studio Code, Git-based workflows, and cloud environments (AWS S3, Azure Maps).

		<ul style="list-style-type: none"> • Strong collaboration and communication skills, with experience supporting GIS analysts, stakeholders, and enterprise teams across government and utility projects.
<p>Phillip J.H. Ulbrich Senior GIS Application Developer</p>	<ul style="list-style-type: none"> • 7+ years GIS application development • Bachelor's or equivalent (Master's preferred) • 3+ years leading development • 3+ years DB integration & optimization • 3+ years scripting & automation • CI/CD & Agile experience 	<ul style="list-style-type: none"> • Holds a Bachelor's degree in Geography and a Master's degree, meeting and exceeding the education requirement. • Possesses 20+ years of GIS application development experience, significantly exceeding the required 7+ years, with deep expertise in ArcGIS Enterprise, ArcGIS Online, ArcGIS Pro, Portal, and ArcSDE. • Demonstrates 3+ years (extensive) leadership experience, leading GIS initiatives, coordinating enterprise deployments, mentoring staff, and driving stakeholder collaboration across federal and municipal agencies including FEMA, NYC OEM, and MTA. • Extensive experience in database integration and optimization, including enterprise geodatabases, ArcSDE environments, SQL-based data processing, ETL workflows, and performance tuning for large-scale geospatial systems. • Strong expertise in scripting and automation, including Python-based geoprocessing, workflow automation, spatial data processing, and development of repeatable GIS data pipelines. • Proven experience in building and supporting enterprise GIS applications, dashboards, and web-based platforms, including ArcGIS Online solutions, geospatial visualization tools, and mission-critical disaster recovery systems. • Demonstrates solid experience in CI/CD practices, Agile methodologies, and version control tools, participating in sprint cycles, issue tracking (JIRA), and collaborative development environments. • Extensive experience in GIS data QA/QC, spatial analysis, and performance optimization, ensuring scalability, accuracy, and reliability of geospatial applications. • Strong communication and stakeholder engagement skills, leading cross-agency coordination, training users, and supporting high-visibility government GIS operations.

Resumes

1. Senior Mainframe Application Analyst

<p>Larry L. McClain, Senior Mainframe Application Analyst</p>
<p>SUMMARY: Senior Mainframe Application Analyst with 20+ years of experience supporting and enhancing enterprise-level legacy systems, primarily within federal and DoD environments. Extensive expertise in COBOL, JCL, Natural, Adabas, and IBM z/OS technologies supporting mission-critical applications for the U.S. Marine Corps. Strong background in batch processing, system maintenance, debugging, and production support, with proven experience in modernization initiatives and transitioning legacy systems toward cloud-based architectures. Adept at collaborating with stakeholders, gathering requirements, and ensuring system stability in high-demand environments. Active Secret Clearance.</p>
<p>EDUCATION</p>
<ul style="list-style-type: none"> • M.A., Mathematics – Arizona State University • B.S., Computer Science – Jackson State University
<p>CORE COMPETENCIES</p>
<ul style="list-style-type: none"> • Mainframe Application Support & Enhancement • Legacy System Modernization & Migration • Batch Processing & Job Control (JCL) • Database Management (Adabas, DB2, Oracle) • System Analysis, Debugging & Production Support • Agile Development & DevSecOps Support • Technical Documentation & Requirements Analysis • Federal / DoD Project Experience
<p>TECHNICAL SKILLS:</p>
<ul style="list-style-type: none"> • Mainframe & Legacy: COBOL, JCL, Natural, Adabas, DB2, z/OS, TSO, ISPF, Endeavor, ROSCOE • Databases: Oracle, SQL Server, PostgreSQL, SQL Anywhere, PL/SQL • Programming: Java, C/C++, PowerBuilder, JavaScript, PHP, PL/1 • Tools & Technologies: Git, Docker, Kubernetes, Maven, JIRA, Confluence, File-Aid, Xpediter

- **Web & Frameworks:** Spring, RESTful APIs, VueJS, AJAX, Bootstrap, CSS
- **Other:** Agile, DevSecOps, System Modernization, Technical Documentation

PROFESSIONAL EXPERIENCE

Senior Mainframe Programmer | Oct 2022 – Aug 2025

Pinao Consulting, LLC – Albany, GA

- Supported and enhanced USMC Transportation Management System (TMS) using Natural, COBOL, JCL, and Adabas
- Maintained batch processing, FTP jobs, and reporting systems
- Utilized IBM z/OS utilities for file management and debugging
- Contributed to system modernization and cloud transition initiatives
- Analyzed and resolved production issues, ensuring system availability and performance in a high-demand environment
- Developed and modified JCL jobs for scheduling, automation, and data processing activities
- Performed code reviews, testing, and validation to ensure compliance with system standards and requirements
- Coordinated with cross-functional teams to implement system enhancements and support releases

Senior Consultant | 10/2022 – 07/2025

SAIC, Inc. – Reston, VA

- Supported JFRG application using PowerBuilder and SQL Anywhere
- Developed enhancements, debugged issues, and optimized performance
- Collaborated with stakeholders to define and implement requirements
- Designed and optimized complex SQL queries, stored procedures, and reporting modules
- Performed root cause analysis and implemented fixes for system defects and data inconsistencies
- Participated in system testing, validation, and deployment support activities
- Maintained documentation for system changes, enhancements, and technical processes

Senior Consultant | 10/2016 – 09/2022

CGI Federal, Inc. – Albany, GA

- Led analysis and modernization of USMC TMS system
- Reverse-engineered legacy systems and mapped to modern architectures
- Supported applications using Natural, COBOL, PowerBuilder, and Java
- Developed documentation, wireframes, and modernization strategies
- Contributed to DevSecOps pipelines using Docker and Kubernetes
- Directed cross-functional teams in system analysis, design, and implementation activities
- Enhanced legacy codebases to improve system performance, scalability, and maintainability
- Supported integration of legacy systems with modern web-based and microservices architectures
- Ensured compliance with federal and DoD standards, including security and audit requirements

Senior Program Analyst | 06/2014 – 09/2016

IPNS, Inc. – Albany, GA

- Supported USMC legacy systems using Natural, COBOL, and Oracle
- Developed PL/SQL components and maintained Java-based applications
- Conducted system analysis, debugging, and documentation
- Collaborated with functional teams to define system requirements and technical specifications
- Performed data analysis and validation to ensure accuracy and consistency across systems
- Assisted in system testing, deployment, and post-production support activities
- Developed technical documentation, reports, and process artifacts

Senior Program Analyst | 07/2013 – 06/2014

SAWTST, Inc. – Albany, GA

- Supported Java and Oracle-based applications
- Developed PL/SQL packages and performed system enhancements
- Participated in full software development lifecycle including design, development, testing, and deployment
- Analyzed and resolved system defects and performance issues
- Collaborated with stakeholders to improve application functionality and usability
- Maintained system documentation and ensured adherence to development standards

Deputy Program Manager | 01/2010 – 05/2013

CGI Federal, Inc. – Albany, GA

- Managed budgets and forecasting for USMC programs

- Supervised team of 35+ technical staff
- Prepared reports and program reviews
- Coordinated daily operations between multiple teams and subcontractors
- Monitored project performance, schedules, and deliverables to ensure contract compliance
- Developed and presented executive-level reports and status updates
- Supported resource planning, staffing, and risk management activities

Software Developer | 02/2008 – 01/2010

Stanley Associates, Inc. – Quantico, VA

- Developed PowerBuilder applications and Oracle integrations
- Built client-server applications and backend services
- Designed and implemented user interfaces and business logic components
- Developed PL/SQL procedures, triggers, and database objects
- Integrated front-end applications with backend databases and services
- Performed testing, debugging, and performance tuning of applications

Earlier Experience

Various Roles (1992 – 2008)

Software Developer / Systems Analyst / Database Developer / Contractor

Organizations include: TEK Systems, TechResults, Apollo Consulting, GERS, EHS, CDI, MiniSystems

- Focus on PowerBuilder, Oracle, PL/SQL, COBOL, C++, and legacy system support
- Developed and maintained enterprise applications across multiple industries including healthcare, retail, and finance
- Designed database structures, ETL processes, and reporting solutions
- Performed system migrations, upgrades, and legacy modernization efforts
- Provided production support, troubleshooting, and user support for business-critical applications

2. Mainframe Application Analyst

Cassandra Harris, Mainframe Application Analyst

SUMMARY: Cassandra Harris is a highly experienced Mainframe Application Analyst with over a decade of hands-on expertise in mainframe application development using COBOL, CICS, and JCL across multiple enterprise environments. She brings strong relational database experience, working extensively with DB2, SQL, and VSAM to design, optimize, and support high-performance systems. Throughout her career, she has demonstrated solid analysis and design capabilities by gathering business requirements, creating technical specifications, and contributing to system architecture and high-level design documents. Cassandra has been actively involved in full SDLC processes, including development, testing, deployment, and production support, ensuring system stability and performance. She also possesses excellent communication and stakeholder management skills, regularly collaborating with project managers, business analysts, DBAs, offshore teams, and business users to deliver successful project outcomes.

EDUCATION

- Master of Science (M.S.), Information Systems Management, Keller Graduate School of Management.
- Bachelor of Science (B.S.), Business Management, Alabama A&M University.

TECHNICAL SKILLS:

- **Software:** COBOL 6, CICS, JCL, Easytrieve, SQL, Visual Basic, JAVA.
- **Operating Systems & Databases:** IBM zOS, OS 32xx, DB2, ADABAS, ADABAS D, Access, Windows 10.
- **Tools & Technologies:** SDSF, Xpedit, TSO/ISPF, Endeavor, CA7, Control-M, FileAid, File Manager, FTP, NDM, QMF, SPUFI, Platinum, Changeman, CA-EasyTrieve, SYNCSORT, VSAM, Explain, Erwin, Toad, Data Warehousing, Python, Oracle, JIRA, Waterfall, Agile, DataStage, Informatica, VISIO, Access, Microsoft Office, SQL Developer, Putty, FileZilla, Fiserv PEP+.

PROFESSIONAL EXPERIENCE

AT&T, Alpharetta, GA-Consumer Billing and Accounting | June 2023 to Present

Systems Engineer

- Application owner for AT&T Billing, Collections, Accounting and Journalizing, and Message Processing for mainframe applications.
- Interact with offshore team to ensure project tasks are accurate, complete, and within budget.
- Create project's high level design documents.
- Develop and define application scope, objectives and prepare technical and/or functional specifications for COBOL, JCL, DB2, and VSAM. Used CA7 for the job scheduling tool.
- Interacted with mid-range applications using APIs and SFTP protocol.
- Participate in production support activities to ensure production abends are resolved accurately.

- Create and review all change requests for successful production deployments.

Fiserv, Alpharetta GA – Banking | August 2022 to May 2023

Mainframe Developer

- Developed and defined application scope, objectives and prepared technical and/or functional specifications for COBOL, JCL, DB2, VSAM using JIRA software development life cycle. Used CA7 for the job scheduling tool.
- Supported Infrastructure Upgrades and validate test cases for smooth transition across environments for overall system improvement and stability. Communicated to business community of system downtime due to software installation.
- Interacted with mid-range applications using APIs and SFTP protocol.
- Worked with Fiserv PEP+ as an integrated product to support ACH processing.
- Streamlined SQL queries using SQL optimizer to execute on DB2.
- Participated in code review, system integration testing and performance tuning.

Elevance Health, Atlanta, GA- Health Claims processing | April 2019 to July 2022

Mainframe Developer Advisor

- Managed the change request process for Enterprise and Off-Cycle production deployments and coordinated with team members when necessary.
- Manage JIRA tickets to ensure smooth transition from open to closed status.
- Developed and defined application scope, objectives and prepared technical and/or functional specifications for COBOL, JCL, DB2, VSAM using JIRA software development life cycle and DevOps version control and testing tools to streamline processes for WGS Claims, Provider and Pricing applications. Used CA7 for the job scheduling tool.
- Interacted with mid-range applications using APIs and SFTP protocol.
- Supported Infrastructure Upgrades and validate test cases for smooth transition across environments for overall system improvement and stability. Communicated to business community of system downtime due to software installation.
- Participated in production support activities to resolve production abends.
- Managed monthly Vendor Upgrade process.
- Participated in technical design and code reviews with offshore team.

General Motors, Alpharetta, GA | May 2014 to March 2019

Sr. Mainframe Developer

(Designs, manufactures, markets, and distributes vehicles and vehicle parts, and sells financial services, with global headquarters in Detroit's Renaissance Center.)

- Sr. Mainframe Developer for mainframe applications WPCS (Worldwide Product Cost System), RMM (Rate Management Module), CMBS (Corporate Material Brokering System) and GLI (General Ledger Interface).
- Interacted with the business community to gather business requirements. As a result, requirements were converted into technical specifications for the development teams to be designed and developed for moderate to complex business processes using COBOL, DB2, CICS, JCL, FileAid, SDSF, TSO/ISPF, Endeavor and using Agile software development life cycle and DevOps version control and testing tools to streamline processes. Used CA7 for a job the scheduling tool.
- Interacted with mid-range applications using APIs and SFTP protocol.
- Supported the DLM disk library as a means of extending space without having performance impacted by the delays of physical tape.
- Streamlined SQL queries using SQL optimizer to execute on DB2.
- Thoroughly review change requests for all applications for successful production deployments.
- Created and executed unit, system integration, and user acceptance test cases.

Georgia Department of Revenue, Atlanta, GA | July 2007 to May 2014

Sr. Mainframe Developer

(The principal tax collecting and tax law enforcement agency for the state)

- As part of a team effort, successfully implemented the transition of mainframe applications to mid-range application ITS (Integrated Tax System) in a timely manner. This application is used to process all tax
- returns for the state of Georgia.
- Conducted project analysis and requirements gathering sessions with the business community for business-critical projects using SDLC (Systems Development Life Cycle) Methodology. As a result, requirements were converted into technical specifications for the development teams. During these JAD sessions, system architect design and data flow diagrams were presented.
- Designed and developed moderate to complex business processes using COBOL, CICS, DB2, JCL, FileAid, SDSF, TSO/ISPF and Endeavor.
- Interacted with mid-range applications using APIs and SFTP protocol.
- Time estimates were provided for all development projects mandated by the Georgia State Legislature.

- Facilitated effective weekly project update meetings with the business and project teams.
- Monitored batch cycles to ensure successful completion.
- Monitor and analyze system performance by using transaction queueing tool to meet SLAs for business continuity.
- Monitor production batch processes to ensure successful completion and report issues following the on-call support protocol.

3. Senior Application Oracle Database Administrator

John Mosco, Senior Application Oracle Database Administrator

SUMMARY: Senior Oracle Database Administrator with over 20 years of experience managing and securing enterprise-level Oracle database environments in mission-critical federal and DoD systems. Possesses deep expertise in Oracle installation, configuration, patching, upgrades, and lifecycle management, ensuring high availability, reliability, and compliance with organizational standards. Highly proficient in SQL performance tuning and optimization, utilizing AWR reports and Oracle Enterprise Manager to enhance the efficiency of procedures, functions, packages, and triggers. Strong background in supporting application teams through in-depth troubleshooting and debugging of PL/SQL code.

Demonstrated expertise in designing and implementing RMAN-based backup, recovery, and disaster recovery strategies, including database cloning and restoration planning. Experienced in Oracle Net services, enterprise connectivity, and UNIX/Linux (RedHat) environments with automation capabilities. Skilled in database security, access controls, auditing, encryption, and compliance with DISA STIG and RMF frameworks. Hands-on experience with cloud and hybrid infrastructures, including Microsoft Azure, combined with proven strength in 24x7 operational support, capacity planning, monitoring, and documentation.

EDUCATION & CERTIFICATION

- Master of Business Administration (MBA), Information Systems Management | Delaware Valley University 2014 – 2016
- Bachelor of Science (BS), Information Technology | 2006 – 2010
- Microsoft Certified: Azure Data Fundamentals
- CISSP
- Microsoft Certified: Azure Fundamentals

CORE COMPETENCIES

- Oracle Database Administration (Enterprise Environments)
- SQL / PL-SQL / Relational Database Design
- Backup, Recovery & High Availability (RMAN, Data Protection Strategies)
- Performance Monitoring & Optimization
- DISA STIG Compliance (Oracle & Application Platforms)
- DoD RMF, ATO, Continuous Monitoring
- Database Security, Auditing & Access Controls
- Azure Cloud Infrastructure (IaaS / PaaS)
- Capacity Planning & Storage Management
- Change Management & Configuration Control
- Documentation & SOP Development
- 24x7 Operational Support / On-Call Environments

TECHNICAL SKILLS:

- **Databases:** Oracle Database, SQL, PL/SQL, Data Modeling
- **DB Administration:** Installation, Patching, Upgrades, RMAN, Database Cloning
- **Performance & Monitoring:** Oracle Enterprise Manager, AWR Reports, SQL Tuning
- **High Availability:** Disaster Recovery, Data Guard–Aligned Architectures
- **Security & Compliance:** DISA STIG, DoD RMF, FGAC/VPD, Auditing, Encryption
- **Operating Systems:** UNIX, Linux (RedHat)
- **Scripting:** Bash, KornShell
- **Cloud Platforms:** Microsoft Azure, Hybrid Environments
- **Connectivity:** Oracle Net Services, ETL Support
- **Operations:** 24x7 Production Support, Change Management, Documentation

PROFESSIONAL EXPERIENCE

Defense Logistics Agency (DLA) | April 2023 – Present

Senior Oracle Database Administrator (DBA) / Database Security Lead

- Serve as Senior Database Administrator supporting mission-critical Oracle database environments within a secure Azure cloud and hybrid infrastructure.
- Install, configure, maintain, and upgrade Oracle database software, including application of Critical Patch Updates (CPUs) and security patches in accordance with DoD change management procedures.

- Design, implement, and maintain high-availability database architectures, ensuring system uptime, fault tolerance, and data integrity.
- Implemented Oracle Fine-Grained Access Control (FGAC/VPD) policies to enforce row-level security and data access restrictions.
- Develop, test, and manage backup, recovery, and disaster recovery strategies using enterprise best practices and tools such as RMAN and Data Guard-aligned solutions.
- Perform proactive database performance monitoring and tuning, utilizing tools such as Oracle Enterprise Manager (OEM), AWR reports, and SQL tuning techniques.
- Conduct capacity planning, storage analysis, and forecasting to support scalable growth and future mission requirements.
- Developed and maintained UNIX/Linux shell scripts (Bash/Korn) for database automation, monitoring, and maintenance in RedHat Linux environments.
- Enforce database security controls, including authentication, authorization, auditing, and encryption, in compliance with DoD, DISA, and service-specific security policies.
- Apply and maintain DISA STIG compliance for Oracle databases and supporting application platforms.
- Support RMF processes, including risk identification, mitigation planning, continuous monitoring, and documentation to sustain Authority to Operate (ATO).
- Configure and manage database auditing, audit trails, and compliance reporting to support inspections, accreditation, and cybersecurity audits.
- Collaborate with application development teams on database schema design, query optimization, and integration efforts.
- Provide 24x7 operational support, troubleshooting complex database incidents and participating in on-call rotations.
- Develop and maintain comprehensive database documentation, SOPs, and operational procedures.

Defense Logistics Agency – Rapid Deployment Team (RDT) | August 2023 – December 2023
 Senior Database Administrator / Continuity & Disaster Recovery Lead (Collateral Duty)

- Led database continuity and availability planning for rapidly deployable, mission-critical systems supporting global contingency operations.
- Ensured secure database access, availability, and recoverability in high-risk and time-sensitive operational environments.
- Experience with Oracle-based ETL and data integration.
- Assisted development teams in debugging and optimizing PL/SQL code including triggers, procedures, functions, and packages.
- Supported disaster recovery readiness and failover planning for systems supporting logistics and supply-chain applications.

Defense Logistics Agency | June 2021 – April 2023
 Database Operations & Information Security Administrator

- Supported enterprise database-backed systems operating within classified and unclassified DoD environments.
- Provided operational support for secure database access, data integrity, and system availability.
- Assisted in implementation of auditing, access control enforcement, and compliance validation.
- Supported vulnerability remediation, patching, and security hardening aligned with DISA STIG and RMF requirements.
- Collaborated with system owners and engineers to troubleshoot complex database and infrastructure issues.

Pennsylvania Army National Guard / Joint Force Headquarters | Multiple Assignments | 2001 – 2022
 Senior Database & Information Assurance Administrator

- Administered and secured enterprise-scale databases and information systems supporting operational, logistics, and command-and-control missions.
- Designed and implemented data protection, access control, and auditing mechanisms to safeguard sensitive and classified information.
- Applied system hardening, patch management, and compliance validation in accordance with DoD security directives and RMF controls.
- Supported system accreditation efforts, contributing to risk assessments, POA&Ms, and authorization documentation.
- Provided senior-level technical guidance on database availability, disaster recovery, and continuity of operations.
- Ensured systems met strict availability, performance, and security requirements in deployed and garrison environments.

Delaware Valley University / Delaware County Community College | 2010 – Present
 Database Systems, Cloud Computing & Cybersecurity

- Instruct courses covering database concepts, relational database systems, SQL, cloud infrastructure, and cybersecurity principles.
- Educate students on enterprise database administration, security compliance, and cloud-based system design.
- Develop curriculum addressing modern database technologies, DevOps practices, and secure system operations.

4. Application Oracle Database Administrator

Qin Li/ Application Oracle Database Administrator

SUMMARY: Senior Database Architect/DBA with over 23 years of hands-on expertise in Oracle database administration, development, and data modeling across federal and enterprise environments. He exceeds the requirement of 10+ years managing Oracle database systems and demonstrates strong proficiency in PL/SQL development, debugging triggers, procedures, functions, and packages, as well as optimizing SQL performance for complex applications. He has extensive experience supporting application teams with database connectivity, performance tuning, and troubleshooting, along with designing and maintaining robust data models. His background includes working in UNIX/Linux environments, developing scripts, and implementing backup and recovery strategies aligned with Oracle RMAN practices. Additionally, he has applied role-based and fine-grained access control, ensured data security compliance, and contributed to ETL and data warehouse solutions, including exposure to Oracle tools and enterprise data integration. His advanced academic qualifications in Computer Science and related fields further strengthen his alignment with the role requirements.

EDUCATION & CERTIFICATION

- D.Sc. Doctor of Science, Information Technology (Qualification), Towson University
- MS, Computer Information System, Georgia State University
- MBA, Finance, Auburn University
- BS, Computer Science, Shanghai Industry University
- CEH v8 (Certified Ethical Hacker 2014) --- ECC66715762222
- CompTIA Cloud+ (2014) --- COMP001020689922
- CompTIA Security+ (2023) --- COMP001020689922
- CompTIA Network+ (2014) --- COMP001020689922
- ITIL v3 Foundation ITSM (2014) --- Registration#4965749.20242124
- Oracle PL/SQL Database Programming (2014) ---265992717
- Microsoft Certified Database Administrator (MCDBA 2006) --- MCP ID# 3757910
- AWS Solution Architect Associate Certification Training (2017)
- E-Commerce Certificate from Georgia State University (2000)
- DOD Secret Clearance – Active
- DOE L level Clearance -- Active

TECHNICAL SKILLS:

- **Databases:** SQL Server 2012/2016/2019/2022, RDBM, ArcGIS, MySQL, PostgreSQL, MongoDB, T-SQL, SQL, PL/SQL, SQL*PLUS, DB2, ODBC, JDBC, OLE DB, DTS, SSIS, SSRS, SSAS, SQL Server 2012/2014/2016/2019/2022 Enterprise Edition, Oracle 10g/11g, T-SQL, PL/SQL, Azure Services, Esic ArcGIS/ArcMap/ArcIMS/ArcView/ArcInfo/ArcExplorer Pro & Ent., Windows Azure, Microsoft SQL Azure Databricks, Factory, Services Bus
- **Operating Systems:** Elipse, TFS, ADO. NET Entity Framework, MS Sharepoint 2019, RDBMS, Jira, Confluence, Github, CI/CD, API Integration, REACT, Docker, Cheetas, Stitches
- **Applications:** Red Gate, LiteSpeed, Toad, Idera Diagnostic Manager, SQLsafe, Erwin 7.1/7.3/8/9.5 Modeler, ER/Studio, JPA, Stitches, Cheetas, GitLab, Docker, Visual Studio 2010-2018/.NET, Macromedia (Flash, Firework, Shockwave), C#, Java, .NET, Cold Fusion, JavaScript, TSQL, HTTP, TCP/IP, FTP, Cloud Computing, SQL Azure, AWS Clouding

PROFESSIONAL EXPERIENCE

US Department of Defense (DOD), Pentagon Washington DC | 4/2024 – Current

Sr. DBA/Database Developer

- Working with the Congressional CHMR/DMP/UDRA/STIG project.
- Designed and implemented AI/ML-driven monitoring solutions to predict database performance bottlenecks and proactively resolve issues.
- Leveraged machine learning models to automate root cause analysis, reducing manual troubleshooting of performance issues.
- Developed intelligent anomaly detection pipelines using Python, Oracle Machine Learning, and cloud AI services for log analysis and early warning of database failures.
- Designed and implemented MS Access-based reporting tools to streamline data entry and provide user-friendly interfaces for non-technical personnel.
- Applied WebLogic Server STIG hardening and patch management in compliance with DoD cybersecurity standards, ensuring secure communication between database and application tiers.

- Advised analysts and operational teams on efficient access patterns, indexing, and role-based permissions, improving query performance and compliance.
 - Deployed predictive patch management automation to identify high-risk vulnerabilities and recommend optimal patching schedules.
 - Collecting and analyzing the requirements and specifications from the team of the Joint Chiefs of Staff.
 - Leading the data model design and developing with Oracle/SQL Server and PostgreSQL DB system.
 - Communicating with different levels of analysts/users to clarify data sources and ETL mappings.
 - Integrated RPA bots with SQL Server, Oracle, and PostgreSQL databases for real-time data extraction, transformation, and visualization.
 - Configured and maintained Oracle WebLogic Server environments integrated with Oracle 11g databases to support secure middleware operations and role-based access control (RBAC) for the CHMR/DMP/UDRA/STIG project.
 - Writing query optimize in-application and tuning stored procedures by using PL/SQL & PSQL.
 - Working with various data sources from Azure, AWS, Oracle, SQL Server, PostgreSQL and files.
 - Support applications developing tasks with designing queries and troubleshooting and performance tuning.
 - Performing database consultant roles like data architect, database developer and database administrator, etc.
 - Researching different system integration and the ETL ingestion pipeline framework process between SNow and DMP.
- Environment: Oracle & PostgreSQL, Erwin, PL/SQL, TSQL, PSQL, Docker, NoSQL Big Data, PowerShell, ServiceNow.

US Air Force DOD, Nellis AFB, Las Vegas NV | 1/2024 – 4/2024

Sr. DBA/Database Developer

- Collecting and analyzing the final requirements and specifications of the project.
- Leading the database architecture and framework design and implementation.
- Integrated MS Access solutions with enterprise data warehouses to support cross-departmental reporting and analytics.
- Applied advanced validation and statistical auditing methods to ensure high-quality data pipelines, reducing error rates and enhancing reporting reliability
- Leading and setting up SQL Server and Apache Hadoop hardware architecture and software configuration.
- Communicating with different levels of analysts/users to clarify data history and perform a data mapping process.
- Write and optimize in-application SQL statements by TSQL and PL/SQL
- Support applications developing tasks with designing queries and troubleshooting and performance tuning.
- Analyzing data source packages and designing the ETL ingestion pipeline framework process.
- Performing database consultant roles like data architect, database developer and database administrator, etc.

Environment: SQL Server 2016/2019/2022, Azure SQL, AWS Aurora/RDS, PostgreSQL, Erwin, Regression Testing, NoSQL Big Data, PowerShell, JPA, Stitches, Cheetas, GitLab, Docker.

Naval Nuclear Laboratory/DOE/DOD, Idaho Falls, ID | 1/2023– 12/2023

Sr. GIS Database Developer

- Defined project scope and collected requirements and feasibility analysis.
- Designed ArcGIS/ArcMap databases conceptual diagram, logical diagram and physical diagram.
- Prepare and ETL all data sources to staging & final data warehouse tables by using FME and ArcGIS.
- Designed and applied AI, ML and DL to the application with maps and AI prediction & Tensorflow training models.
- Performed spatial analysis by using Linear Referencing toolbox and applying scrum CI/CD method.
- Collaborated the AR/VR applications for geospatial visualization
- Tested and performed proof concept of LLM and Transformers applying Megatron-Turing NLG & PaLM (Pathways Language Model), etc.
- Managed and updated a complex spatial database of over 100K records, ensuring 98% accuracy and consistency.

Environment: SQL Server 2019/2022, Azrue & Databricks, AWS Aurora/S3, ArcGIS, ArcMap, ArcCatalog, ArcGlobe, and ArcScene, 3D models, FME, Revent, Erwin 8, Windows 10 Server, Jira CI/CD, Confluence, GitHub.

US Department of Transportation, Washington D.C. | 4/2016 – 1/2023

Sr. Data Architect/Gate Keeper DBA

- Led and oversighted each step of the project in database and front-end software development activities.
- Provide technical design leadership with the responsibility to ensure the efficient use of resources, the selection of appropriate technology and use of appropriate design methodologies.
- Wrote Database design, ERD design and Erwin design best practice documents.
- Wrote Database, ERD and Erwin design best practice checklists.
- As a release manager responsible for all deployments to preprod and production environment.
- Define various data sources and data destinations for data mapping documents, etc.
- Designed and maintained data warehouse/schemas/modelling for DDL & DML changes.
- Managed and maintained various Esri/GIS/ArcIMS servers and maps applications.

- ETL/ELT data sets from sources to target tables by SCD2 including troubleshooting and maintenance.
 - Worked with several functional teams to design and implement key components for the FTA IT mission.
- Environment: AWS/Appian, SQL Server 2008R2/2014/2016/2019, MySQL 5.7, 8.0., ArcGIS 10.5-10.9, ArcIMS, ArcMap, Erwin 7.3/8 Modeler, Power BI, Appian, Python, Jira CI/CD, Confluence, Bitbucket, GITHUB.

U.S. Department of Housing and Urban Development. Washington D.C. | 11/2014 – 3/2016
Sr. Database Developer

- Wrote and optimize in-application SQL statements by TSQL and PL/SQL
- Provided T-SQL codes for updating system changes from functional developers.
- ETL data to target system and prepared documentation and specifications

Environment: SQL Server 2012/2016/2019, Oracle 10g/11g, Erwin 7.1/7.3/8 Modeler, ArcGIS 10.4, ArcIMS, ArcView, ArcInfo, .NET, VB, TFS, MS SharePoint 2019.

US COURTS, Washington D.C. | 9/2010 – 10/2014
Sr. SQL Server DBA/Developer

- Competent to work at the highest level of all phases of database management.
- Reviewed and designed database management system and polices including disaster recovery and virtualization.
- Backup and restore databases; develop backup strategies and restore procedures, job scheduling by using SQL Server 2005/2008/2012 Management Studio.

Environment: SQL Server 2005/2008/2008R2/2012, RDBM, MongoDB, ArcGIS, ArcMap, ArcIMS, ArcView, ArcInfo, ArcExplorer, .NET, C#.

Merrill Lynch (Bank of America), Jersey City, New Jersey | 6/2009 – 8/2010
Sr. SQL Server DBA/SSIS Developer

- Designed and developed SSIS packages for automating QA ETL process.
- Managed/ implemented/designed SQL servers for QA teams.
- Backup and restore databases; develop backup strategies and restore procedures, job scheduling by using SQL Server 2005/2008 Management Studio.

Environment: SQL Server 2005/2008/2012, Windows 2012 Server, TFS, Oracle 9.2/10g, SQL PLUS, DB2, UNIX (Sun Solaris), Sybase, Toad, QC, QTP.

American Psychological Association, Washington D.C. | 5/2007 – 5/2009
Sr. SQL Server DBA

- Developed and implemented databases and coding standards, improving performance and maintainability of corporate databases.
- Provided back-end support for functional testing and performance testing.
- Refresh database environments.
- Acting as liaison between users, programmers and management.

Environment: SQL Server 2000/2005/2008, RDBM, Windows 2008 Advanced Server, Diagnostic Manager, SQLsafe, AdminTools, TFS, Biztalk 2006 & 2008, MongoDB, Toad, RedGate, Quest Spotlight/LiteSpeed.

Decisive Analytics, Co. Alexandria, Virginia | 11/2003 – 04/2007
Sr. SQL Server DBA

- New installations preparation including pre-tasks, execution and post-tasks.
- Analyze business requirements and define entity objects, build logical data models that describe all the data and relationships between the data.
- Database design requires elicitation, technical specification and mapping from business entity definitions to conceptual, logical and physical design.
- Data modeling mapping from business object model to relational data model.

Environment: SQL Server 2000/2005, LiteSpeed, Windows Server 2003, Linux, Java, Erwin 7.1, ER/Studio, Hibernate.

5. Senior Application DB2 Database Administrator (DB2 Performance Tuning)

Praveen Kumar Varatharaj, Senior Application DB2 Database Administrator (DB2 Performance Tuning)

SUMMARY: Praveen Kumar Varatharaj is a highly experienced Mainframe DB2 Database Administrator with 13+ years of hands-on expertise in managing and maintaining enterprise DB2 environments, aligning well with the Senior Application DB2 DBA role requirements. He has extensive experience in DB2 system administration, including database object management, performance tuning, SQL optimization, and supporting application teams in debugging DB2 procedures, utilities, and processes. He has demonstrated strong capabilities in managing database security and user access, as well as performing data modeling and structural changes across large-scale systems. Praveen has actively participated in disaster recovery planning and execution, ensuring high availability and data integrity, and has consistently supported

production environments with 24/7 monitoring and issue resolution. Additionally, his strong communication skills and experience collaborating with cross-functional teams, including developers, analysts, and stakeholders, make him well-suited for complex enterprise environments.

EDUCATION & CERTIFICATION

- Bachelor of Engineering (B.E.) - Velammal College of Engineering, Chennai, India

CORE COMPETENCIES

- DB2 for z/OS Database Administration and Object Maintenance. Creation of database objects, performing all kinds of object structural changes, Data refresh, non-UTS to UTS tablespace conversions.
- DB2 Version Upgrades & Function Level Activations (v11→v12→v13).
- IADR - Q-Replication, SQL Replication, CDC Connect, Attunity R4Z, SQData.
- Performance Tuning (Explain, Index Advisor, Buffer Pools, Mainview, Apptune)
- Product Install and Maintenance using SMP/E (RECEIVE, APPLY, ACCEPT)
- Participate in DR exercise, zOS hardware upgrade, DASD storage upgrade.
- BMC Tools (Change Manager, Catalog Manager, Mainview, Apptune, DASD Manager), BMC DB2 AMI & Classic Utilities.
- BM Utilities (LOAD, UNLOAD, REORG, COPY, RUNSTATS, RECOVER, CHECK DATA, DSN1COPY, DSN1PRNT, DSN1COMP, REBUILD, MODIFY RECOVERY).
- 24/7 production support.

TECHNICAL SKILLS

- **Tools:** BMC Mainview, Change Manager, Catalog Manager, Query Monitoring, QMF, Endeavor, Log Analysis, Apptune, Omegamon, TWS, LCM, CDC management Console, Data Studio
- **SQL Processing:** SPUFI, QMF, DSNTEP2, DSNTEP4.
- **Object Maintenance:** LOAD, UNLOAD, REORG, COPY, REPAIR, RUNSTATS, REBUILD, RECOVER, DSN1COMP, DSN1COPY, DSN1PRNT, MODIFY RECOVERY, CHECK DATA

PROFESSIONAL EXPERIENCE

Tata Consultancy Services (TCS) - Cleveland, Ohio | Sep 2021 – Present

Associate Consultant: Mainframe DB2 System Programmer & Application DBA

- Installed and upgraded DB2 and BMC software using SMP/E, applied regular RSU maintenance for database and vendor products.
- Upgraded DB2 v12 to v13 FL500 and BMC DB2 tools from v12.1 to v13.1.
- Installed QMF v12 and migrated objects from Broadcom PRF to QMF. Applying RSU maintenance to the QMF product using SMP/E.
- Installed CDC Connect (Precisely) to replicate DB2 data to Kafka.
- Installed DataLenz for real-time DB2 security monitoring.
- Performed Reorg, Runstats, Rebuild, and other DB2 maintenance utilities.
- Built and maintained databases based on application requirements.
- Non-UTS to Universal tablespace conversion (PBG and PBR).
- Workfile tablespace (Sort and DGTT) management in DataSharing systems.
- Created and managed utility jobs for multiple databases. Assisted application teams with the Data refresh between different environments.
- Installing the DB2 clients on the windows machine, reviewing the DDF reports for JDBC versions and working with the app team to upgrade the DB2 drivers.
- Tuned system parameters(zParms) and objects to leverage new DB2 features and function levels.
- Monitored database performance daily to improve response time.
- Supported HA/DR solutions and participated in disaster recovery activities.
- Provided production release support and modified DB2 object structures as needed. Creation of objects, structure modifications, changing the tablespace parameters, index creation.
- Performing health checks, monitoring the system logs, troubleshooting the production issues, Oncall Support.
- Creating cases and working with vendors (IBM, BMC, Precisely) to troubleshoot issues.
- Participated in the zOS 3.1 upgrade and z17 hardware upgrade.
- Automating DBA tasks using JCL, configuring storage reports using BMC DASD manager, resolving production issues.
- Decommissioning of database objects, reclaiming space, scheduling purge in non-production to maintain retention and avoid excessive growth of tables.

Cognizant Technology Solutions - Chennai, India | Dec 2017 – Aug 2021

Senior Associate: Mainframe DB2 zOS DBA & System Programmer

- Migrated DB2 from v11 to v12 and activated function levels for application enhancements.
- Performing object creations and modifications based on the application requirements.

- Supported monthly, quarterly and yearly DR exercises.
- Troubleshot performance issues; identified long-running queries and high-CPU jobs using BMC DOMBRPT1(Apptune).
- Upgraded HPU from v4.3 to v5.1; implemented ZIIP processing, reducing unload CPU time from 115 mins to 19 mins.
- Converted 5000+ segmented tablespaces to UTS PBG across environments.
- Performed GTF traces and DB2 SVC dumps during performance issues.
- Conducted ZIP390 FTP testing to resolve recurring FTP errors.
- Installed TestBase extract product and Attunity R4Z replication software.
- Fixed DB job abends; created and scheduled DB2 maintenance jobs.
- Performed data refresh from production to lower environments for performance testing.
- Applied RSU1901 and RSU2005 DB2 maintenance; executed full SMP/E cycles.
- Conducted performance tuning using explain, index advisor, and buffer pool simulation.
- Handled incidents, service requests, change requests, and provided on-call support.

Wipro Technologies - Chennai, India | Aug 2012 – Nov 2017

Senior Administrator - DB2 zOS Application DBA

- Database Management , performed object creation, structure changes across all environments.
- Resolved object restrictive states, utility abends (REORG), and DB2 errors.
- Performed DB2 object creation, modification, and decommissioning.
- Set up Q-Replication (uni- & bi-directional) and migrated SQL Replication to CDC IIDR.
- Managed user access, system security, and database housekeeping (Reorg, Imagecopy).
- Supported DR drills, standby database operations, and environment synchronization.
- Decommissioning of database, fixing bind issues, troubleshooting SQL errors.
- Managed users object access, took care of database housekeeping jobs.
- Performed object maintenance using IBM utilities and BMC utilities which includes reorg, runstats, rebuild, check data, unload and load.
- Provided after hours support in case of production issues.
- Managed replication between Oracle and Mainframe.
- Ran traces in Mainview and batch reports.
- Supported quarterly production releases and provided after-hours support.
- Handled incident tickets, service requests, and change management.
- Created and scheduled utility jobs; synchronized production to non-production environments.
- Worked with tools including Data Studio, Control Center, Toad for Oracle, Putty, WinSCP.
- Mentored users and application teams in DB2 technologies.

6. Application DB2 Database Administrator (DB2 Database Administration)

Luke Chen, Application DB2 Database Administrator (DB2 Database Administration)

SUMMARY: Database Administrator with over 15 years of extensive experience specializing in DB2 environments across z/OS, AIX, Linux, and Windows platforms, supporting complex, mission-critical enterprise systems. Possesses strong expertise in database maintenance, system management, performance monitoring, and high-availability operations to ensure optimal reliability and uptime. Demonstrates proven proficiency in DB2 database security, including role-based access controls, data integrity, auditing, and regulatory compliance, while maintaining secure access to sensitive enterprise data. Highly experienced in collaborating with development teams throughout the full Software Development Life Cycle (SDLC), providing hands-on support in debugging and optimizing stored procedures, triggers, functions, and packages. Brings advanced skills in SQL performance tuning, execution plan analysis, and optimization of high-volume OLTP and data warehouse workloads, consistently improving system performance and response times. Experienced in logical and physical data modeling for transactional systems and enterprise data warehouses, as well as in disaster recovery planning, backup and recovery strategies, and business continuity support, complemented by strong stakeholder communication and cross-functional collaboration skills.

EDUCATION

- Bachelor, Lanzhou University
- Informix database training
- CA data model & process model training (ERWIN & BPWIN)
- HP HP9000 & HPUX system administration training
- IBM RS6000 & AIX system administration training
- Sun storage training
- Cisco routing & switching training
- Peoplesoft DBA training for Oracle database
- IBM DB2 training

- Hyperion(Oracle) Essbase & OLAP training
- IBM project management training
- IBM Replication training (CDC, Q & Data Propagator)
- IBM ETL training (Datastage)
- IBM Mainframe Programming training (JCL,REXX,COBOL)
- IBM IMS Database Design
- Informatica ETL training
- Siebel Business Intelligence (Siebel Analytics, OBIEE) training
- Guardium customization training
- AB INITIO ETL training
- Microsoft Sharepoint & SSIS/SSRS integration training
- Oracle Golden Gate training

CERTIFICATIONS

- HP-UX System Administration Certification
- Microsoft Certified DBA (MCDBA SQL SERVER 7)
- Oracle Certified Professional (OCP 8i)
- CCNP (Cisco Certified Network Professional) – Routing & Switching
- CCNA (Cisco Certified Network Associate) – Routing & Switching
- IBM Certified Advanced Database Administrator – DB2 Universal Database V8.1 (for Linux, UNIX, and Windows)
- IBM Certified Database Administrator – DB2 Universal Database V8.1 (for z/OS)
- IBM Certified Database Administrator – DB2 Universal Database V8.1 (for Linux, UNIX, and Windows)
- IBM Certified Application Developer – DB2 Universal Database V8.1 Family
- IBM Certified Solution Designer – DB2 Business Intelligence V8
- IBM Certified Database Associate – DB2 Universal Database V8.1 Family

TECHNICAL SKILLS

- **Databases:** SQL Server (6.5–2022), DB2 (v6–11 on z/OS, AS/400, Unix/Linux), Oracle (7–11g), MySQL, PostgreSQL, Greenplum
- **NoSQL Databases:** MongoDB, DynamoDB
- **Legacy Databases:** ADABAS, IMS DB, Informix, Sybase, Berkeley DB, InterBase/Firebird
- **Analytical Databases:** Vertica, Snowflake, Databricks
- **Cloud Platforms:** AWS (EC2, S3, RDS, Redshift, Glue), Azure (VM, Data Factory, Cosmos DB), OCI, GCP
- **ETL & Integration:** SSIS, Informatica, Ab Initio, DataStage, Pentaho, Airflow
- **Oracle Integration:** ODI (Sunopsis, 10g–12c), GoldenGate
- **Data Warehousing:** ODS, EDW, Data Marts, Kimball, CIF
- **Data Modeling:** ERwin, PowerDesigner, COOL:GEN, RDA
- **BI & Reporting:** SSRS/SSAS, OBIEE, MicroStrategy, Cognos, Hyperion, Crystal Reports
- **Programming Languages:** C, C++, COBOL, Java, C#
- **Scripting Languages:** Python, Perl, PowerShell, Bash, KornShell, JCL, REXX, CLIST
- **SQL Technologies:** SQL, T-SQL, PL/SQL, SQL/PL, JDBC, SQLJ, Pro*C, Perl DBI
- **Big Data:** PySpark, Pandas
- **Application Development:** Client/Server, Stored Procedures, Triggers
- **Web Development:** CGI (C/Perl), Perl Catalyst, Flask, Django
- **Automation & Scheduling:** AutoSys, IBM Tivoli NetView, Custom Perl/REXX Tools
- **Database Operations:** Performance Tuning, Troubleshooting, Migration, Data Conversion

PROFESSIONAL EXPERIENCE

PayGo DBA consulting service | Mar 2021 – present

Consultant

- Plan & implement the migration from on-premises database server farms to cloud platforms, e.g. Azure ecosystem, AWS ecosystem, GCP for middle-size and small enterprises.
- Plan & implement the migration from traditional data warehouses to next-gen solutions, e.g. Databricks, Snowflake.
- Plan & implement the migration of reporting/BI solutions from traditional tools (SSRS, Crystal Reports, etc) to modern self-service tools (Power BI, Tableau).
- Plan & implement the migration from traditional ETL tools (SSIS, DataStage, etc) to ELT (DBT, loader plus customized stored procedures, etc).
- Design & build Microsoft BI solution (SSIS, SSRS, SSAS, Power BI) for middle-size and small enterprises.
- Build super-complicated enterprise dashboards using a mixture of technologies (utilizing existing commercial tools plus customized programs).

- Design & build low-cost database/BI solution for middle-size and small enterprises utilizing open-source products, e.g. PostgreSQL, MySQL, DBT, Airflow, Pentaho, etc.
- Design & implement OLTP database and data warehouse, including logical & physical models.
- Build & support enterprise ETL/ELT solutions using Datastage, Informatica, ABInitio, ODI, etc.
- Administrate & enhance on-premises & cloud databases for middle-size and small enterprises.
- Support legacy systems, e.g. IBM z/OS, various old commercial UNIX systems.
- Support legacy enterprise reporting solutions based on Brio, OBIEE (Siebel Analytics), Crystal Report, etc.
- Implement website construction using open-source technologies, e.g. Python Django/Flask for middle-size and small enterprises.
- Provide tutoring service about migrating from traditional on-premises data warehouse to data lakes.
- Provided tutoring service about database migration, e.g. from Sybase to PostgreSQL, DB2 to SQL Server, etc.
- Provide tutoring service for IT professionals who are not familiar with legacy systems, old Enterprise tools & solutions.
- Provide Tutoring service for IT management staff on specific topics, such as Mainframe modernization, Mainframe & open system integration, Mainframe re-hosting, commercial UNIX to LINUX migration, etc.

Data Engineer (ETL & DBA) | May 2019 – Feb 2021

- New York City's Department of Health and Mental Hygiene (NYC DOHMH)
- (Contractor by Research Foundation for Mental Hygiene) NYC, NY
- Assigned to New York City's Department of Health and Mental Hygiene (NYC DOHMH).
- Build the Medicaid data warehouse for NY City, based on data from NY State Medicaid data warehouse.
- Conduct pilot projects on GCP and Azure (platform selection research).
- Implement ETL processing from NYS Medicaid DW to NYC Medicaid DW.
- Fulfill application DBA duty for other NYC DOHMH databases (not infrastructure DBA), mainly ETL and database-related development.
- Fulfill Tableau server admin duty.

Senior Database Specialist | Jul 2016 – May 2017

- Migrated data from ADABAS to DB2 z/OS, ensuring seamless data transfer, accuracy, and minimal downtime during the transition.
- Design & implement the complicated cross-platform data integration.
- Design & implement data exchange/integration among different DBMS, e.g. IMS DB, DB2 on z/OS, DB2 on UNIX, Oracle and SQL SERVER.
- Design & implement the data-feeding procedure from mainframe to open platforms;
- Support the legacy core banking data platform (IMS DB on z/OS, DB2 z/OS).
- Support the enterprise data platform, i.e. Oracle, DB2 LUW (Linux-UNIX-Windows) and Microsoft SQL Server.
- Support the new-business data platform, i.e. PostgreSQL, MongoDB, etc.
- Support MS SSIS, Oracle Golden Gate & ODI (Oracle Data Integrator) for ETL & data integration.
- Support data visualization (SSRS, TABLEAU).
- Conduct pilot projects on OCI and Azure to support new business.

Senior Database & BI Specialist | Jan / 2014 – Jun / 2015

- Act as the primary DBA for Oracle, SQL SERVER, MySQL and PostgreSQL.
- Support BI solution based on Microsoft products (SSIS, SSRS and SSAS).
- Do ETL with ODI, SSIS and hand-made tools (Perl, Python, PowerShell).
- Do data exchange among different DBMS, e.g. Oracle to MS SQL, MS SQL to PostgreSQL, etc.
- Act as backup Oracle DBA.
- Do server-side programming, i.e. stored-procedure and trigger.
- Support Sharepoint & Peoplesoft databases.

Database Solution Architect | Jun 2013 – Dec 2013

- Cloudstone Holding Inc. (contract)
- Design the affordable database cloud service for small enterprises.

Database Solution Designer | Jul 2012 – May 2013

- Economical Insurance (TEIG)
- Act as the primary development DB2 DBA for major development projects.
- Do 2-way data exchange between DB2 and Oracle.
- Do server-side programming, i.e. stored-procedure and trigger.

- Do database programming using JDBC and DBI.
- Do ETL from OLTP to Enterprise data warehouse using ODI.
- Do data synchronization among DB2 AIX, Oracle AIX and DB2 z/OS.
- Support production DB2 database on both z/OS and AIX/Windows.
- Support Oracle and MS SQLSERVER databases in enterprise environment.
- Share the responsibility of data modeler, in charge of physical model.

Senior Database Team Lead | Nov 2011 – Feb 2012

- Aeroplan (AIMIA)
- Act as the DBA lead of the legacy system implemented in 1992.
- Support long-out-of-support legacy software / applications, e.g. COOL: GEN V6, DB2 V7, DPRDP V8, COBOL batch jobs, etc.
- Lead a team of 3 IBM veteran DBAs with more than 30 years' experience.

Senior Database Specialist | Aug 2011 – Nov 2011

- GANZ (Webkinz)
- Being key member of DBA team for Webkinz website.
- Working in DEV, QA, and Production environment, with MySQL & PostgreSQL on Linux.
- Diagnosing performance issues, tuning SQL.
- Performing back up and recovery.
- Writing Perl, Python and Shell scripts to automate DBA tasks, e.g. archiving historical data, find orphan data, etc.
- Building home-made ETL tools using Python/Perl.

Data Warehouse Specialist | Aug 2010 – Jun 2011

- BMO (as IBM contractor)
- Being the primary development DBA and level 3 production support DBA in charge of risk-management banking data warehouse (200+ Terabytes).
- Support ETL team (AB INITIO).
- Supporting the full SDLC (Systems Development Life Cycle), working in DEV, QA, SIT/UAT and Production environment, with DB2 V8.2, 9.1 & 9.5, on AIX 5.3 & 6.1.
- Building, deploying and administering distributed DB2 database management systems, using multiple high availability features (DPF, HACMP, and HADR).
- Managing, tuning, and resolving issues in large Data Warehousing environments.
- Managing availability, data integrity, and security in large Data Warehousing environments.
- Performing the 2-way data exchange between Oracle and DB2 using ODI.
- Diagnosing performance issues, tuning SQL and XML/XQuery.
- Performing back up and recovery.
- Performing database auditing.
- Performing capacity/performance planning & management, using multiple performance features (DPF, MDC, and MQT).
- Performing data modeling.
- Writing Perl and Shell scripts to automate DBA tasks.

VTS Database Architect | Jun 2009 – Jun 2010

- NetStars E-Commerce CO., LTD. (contract)
- Virtual Team Service manager for database-related services.

Senior Database Specialist | Feb 2009 – Apr 2009

- Prinova Inc. (contract)
- Database migration from DB2 V7 on Z/OS to DB2 V8 on Z/OS.
- Database migration from DB2 V7 for LUW to DB2 V8 for LUW.
- Database migration from base development environment (MySQL) to multiple product environments (Oracle, DB2 on Z/OS, DB2 for LUW, MS SQLSERVER).
- Application data migration for Oracle, DB2 on Z/OS, DB2 for LUW, Microsoft SQLSERVER.
- Supporting the full life cycle of software development, DEV, QA, SIT/UAT and Production.
- Database modeling for new application functions.

GIS DB Developer / DBA | Jul 2008 – Jan 2009

- Noetix Research Inc. (contract)

- Geo databases administration for joint projects with University of Waterloo.
- Database modeling for new application functions.
- Performing data exchange between different DBMSs.
- PL/SQL module development for new application functions.
- Managing availability, data integrity, and security.
- Diagnosing and tuning performance issues.
- Performing back up and recovery, and database migration.
- Capacity planning & management.

Senior BI Dev Leader / DBA | Apr 2005 - Mar 2008

- IBM(China) Global Delivery Service
- Siebel BI development leader (April 2006 – October 2007)
- Being assigned to Motorola North-Asia Retail & Channel Management team (a 40-million US\$ project), the biggest Siebel BI implementation then in China.
- Working throughout all phases of Data Warehouse development, including prototyping, requirement analyzing, logical & physical modeling, developing, deploying, SIT/UAT testing, and documentation
- Performing data mapping and ETL definition between Siebel OCRM database and ACRM database, creating and sustaining enterprise reporting data warehouses to fulfill enterprise reporting strategies and objectives..
- Managing and delegating daily tasks to a team of 4 Siebel Analytics Developers, receive guidance from architects and provide guidance for ETL developers.
- Doing Siebel Analytics development.
- Building, deploying and administering distributed Oracle/Siebel environments for testing and system integration purposes.
- Diagnosing and tuning performance issues, doing capacity planning & management.

Senior DB2 DBA | April 2005 – March 2006, November 2007 – March 2008

- Being DB2 & Informix DBA for IBM (Global) Enterprise Business Intelligence Hyperion CoC, support IBM's report systems based on Hyperion Performance Suite (Brio).
- Design, develop and maintain the enterprise reporting data warehouses for IBM (Global) to fulfill enterprise reporting strategies and objectives.
- Managing, tuning, and resolving issues in large Data Warehousing environments.
- Managing availability, data integrity, and security in large Data Warehousing environments.
- Writing Perl and Shell scripts to automate DBA tasks.
- Performing database modeling for new function modules.
- OLAP development and administration using Essbase.
- Support DataStage ETL team.
- Build various tools to manage DB2 UDB on Unix systems.
- Build various tools to facilitate the data exchange/integration between DB2 OS/390, DB2 z/OS and DB2 LUW.

7. Senior Application SQL Server Database Administrator

Nagul Shaik, Senior Application SQL Server Database Administrator

SUMMARY: Nagul Shaik is a highly experienced SQL Server Database Architect with over 14 years of hands-on expertise in the maintenance, management, and optimization of SQL Server database systems, exceeding the 10-year requirement. He holds a bachelor's degree in engineering and has extensive experience in SQL Server connectivity, ETL processes, and enterprise data warehouse environments. He has strong proficiency in writing, debugging, and optimizing T-SQL code including stored procedures, triggers, and functions, along with performance tuning and query optimization. His background includes over five years of experience in advanced data modeling (conceptual, logical, and physical), SQL Server backup strategies, and large-scale data warehouse development using tools like SSIS and Azure Synapse. Additionally, he has solid experience working in UNIX/Linux environments and demonstrates strong capabilities in database security, data governance, and fine-grained access control, making him an excellent fit for a Senior Application SQL Server Database Administrator role.

EDUCATION

- Bachelor of Technology in Electronics and Communications Engineering.

CORE COMPETENCIES

- Proficient in System and Software Development Life Cycle (SDLC) methodologies Agile, Scrum, Kanban and Iterative.
- Experienced in TOGAF and Zachman Enterprise Architecture (EA) frameworks.
- Hands on experience in relational and multidimensional data models design life cycles.
- Have good experience and knowledge in data conversion life cycle.

- Well versed in normalization (1NF, 2NF and 3NF) and de-normalization techniques for optimum performance in relational and dimensional database environments.
- Experienced in designing Entity Relationship Diagrams (ERD) and conceptual, logical and physical data models for OLTP and OLAP systems using data modelling tools like Erwin, DbSchema, ER Studio, SAP Power Designer and Infosphere Data Architect (IDA).
- Experienced in designing OLAP systems using Kimball, Inmon and Data Vault methodologies for Business Intelligence (BI) projects.
- Hands on experience in designing OLAP systems using Star and Snowflake schemas.
- Have hands on experience and solid knowledge in data extraction, data transformation, data profiling, data analysis, data discovery, data masking, data governance, data cleansing, data scrubbing, data validation, data wrangling and Metadata maintenance for Data Warehouse (DWH), Master Data Management (MDM) and Data Conversion (DC) projects.
- Well proficient in Metadata Management (MM), Reference Data Management (RDM) and Test Data Management (TDM).
- Good experienced in ETL, ELT, Data Transformations and Source to Target Data Mapping concepts.
- Experienced in creating and maintaining Slowly Changing Dimensions (SCD) and Change Data Capture (CDC).
- Expertise in Extract Transform and Load (ETL) techniques using Pentaho Kettle, Informatica, SSIS and Microsoft Data Transformation Service (DTS).
- Have good experience with data profiling tools like Alteryx, Trillium and Informatica Data Quality (IDQ).
- Worked with Child Welfare Services (CWS) and Case Management System (CMS).
- Having very good experience in Health Level Seven (HL7) and FHIR messaging specifications and standards.
- Having hands on experience in EMR/EHR applications like Epic Clarity and Epic Caboodle.
- Solid knowledge with Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) applications.
- Experienced in data mining, designing OLAP, ROLAP and MOLAP databases.
- Hands on experience in Data Governance and Data Stewardship policies.
- Solid knowledge in No SQL data models and databases Mongo DB, Greenplum, HBase, Couchbase, Cassandra and Amazon DynamoDB.
- Good knowledge and experience in cloud technologies like Azure Purview, Azure Data Lake Store, Azure Data Factory, Azure SQL DB and Azure Synapse Analytics (SQL DW), Snowflake cloud data warehouse, AWS Redshift, AWS RDS and Google Cloud Platform (GCP).
- Having exposure to big data technologies Hadoop and Spark and extensive experience in both batch and stream processing using Lambda and Kappa architectures.
- Having good knowledge in IBM Mainframe systems, Adabas (Natural) databases.
- Good in creating Ad-Hoc reports, Indexes, Stored Procedures, Triggers, Functions and Packages.
- Having good experience in writing SQL queries to perform end-to-end ETL data validations and solid hands-on experience in Quality Assurance (QA) techniques, performed User Acceptance, Unit, System, Manual, Automated and ETL Testing's.
- Good knowledge and experience in Microsoft Power BI and Tableau tools, created dashboards, score cards and reports.
- Having good knowledge and experience in Windows, UNIX and Linux operating systems.
- Quick learner, self-motivating and enthusiastic to work with new technologies and new people.
- Possessing excellent verbal and written communication skills.

TECHNICAL SKILLS

- **Data Modeling Tools:** Erwin 9.6, DbSchema 9.9.2, SAP Power Designer 16.5, ER/Studio 19.1, Infosphere Data Architect (IDA), Oracle SQL Data Modeler, UML and Microsoft Visio 2016.
- **ETL Tools:** Pentaho Data Integration (PDI), Kettle, Informatica 9.5, SQL Server Integration Services (SSIS), Ab Initio, OBIEE, IBM Data Stage.
- **Data Quality Tools:** Informatica Data Quality (IDQ), Data Quality Services (DQS), Dataflux, Trillium, IBM InfoSphere Quality Stage and IBM Info Sphere Information Analyzer, Query Surge 4, HPQC-ALM.
- **Database Tools:** Azure SQL DB, Azure Synapse Analytics (SQL DW), AWS Redshift, Postgresql, SQL Server Management Studio (SSMS), Microsoft SQL Server 2012/2016, Toad for DB2, Oracle SQL Developer 4.1, Hadoop, Spark, SAP HANA, Db Visualizer Pro 9.2, Oracle 11g/10g, IBM DB2, Teradata, MS Access, IBM Mainframe and Adabas (Natural).
- **Reporting Tools:** Power BI, Tableau, Looker, SQL Server Analysis Services (SSAS), TIBCO Spotfire, Cognos's, Qlik Sense, Qlikview and Crystal Reports.
- **Programming Languages:** ASCII-SQL, PL/SQL, SnowSQL (CLI), Python, XML, XSD, WSDL, NIEM schema, HL7, FHIR, SAS, Spark SQL, R Studio, HTML.

- **Project Tracking Tools:** Microsoft 365 Apps for Enterprise, Microsoft Office Suite 2016, JIRA, Azure DevOps, SVN Version Control, Visual Studio Code, GitHub, Team Foundation Server (TFS), IBM Rational Clear Case and Clear Quest, Prefect, DBT, Alladin.
- **Operating Systems:** Microsoft Windows (10, 8), NT/2000/Vista, Unix, Linux.

PROFESSIONAL EXPERIENCE

UCSF Health (Canopy Health) - San Francisco, CA | Dec 2023 – Present

Data Warehouse Architect/Sr. Data Consultant

(UCSF Health (Canopy Health) is the Bay Area’s health network that connects the best doctors and hospitals in the Bay Area)

- Interacted with project management team to gather and document business requirements for the Enterprise Data Warehouse (EDW) project.
- Designed project architecture and ETL data flow diagrams using Microsoft Visio tool and reviewed with project team.
- Designed Business Process Diagrams (BPD) using Microsoft Visio tool.
- Designed Entity Relationship Diagrams (ERD) using DbSchema tool and reviewed with project team.
- Worked in Master Data Management (MDM) project and integrated master data from various source systems.
- Performed Data Analysis and Data Profile on source tables data to understand business logic.
- Identified Critical Data Elements (CDE) for the Enterprise Data Warehouse (EDW) project.
- Defined Grain, identified Dimensions and Measures for each subject area in an Enterprise Data Warehouse (EDW) project.
- Created data modelling design specifications document for dimensional data models.
- Created naming standards document for logical and physical data models.
- Designed Conceptual Data Model (CDM), Logical Data Model (LDM) and Physical Data Model (PDM) using DbSchema 9.9.2 tool and reviewed data models with project team.
- Designed dimensional data models using Slowly Changing Dimensions (SCD) and Conformed dimensions.
- Conducted data model review sessions with Business architect team.
- Worked on multiple data marts in Enterprise Data Warehouse (EDW) environment.
- Worked on Metadata Management across heterogeneous models.
- Generated business glossary, data dictionary and HTML documents from data models.
- Created business and data quality rules to maintain high quality data in target tables.
- Created Source to Target Mapping (STTM) documents with data transformation logic.
- Created Business Intelligence (BI) reports and performed multidimensional data analysis using Microsoft Power BI and Looker BI tools.
- Created STG, DEV, TST and PRD databases and table definitions.
- Tested and documented Unit and System testing test cases.
- Performed data validation techniques on target database to measure data accuracy and data quality.
- Worked with DBA team to deploy Physical Data Model (PDM) DDL into PRD databases.

Environment: DbSchema 9.9.2, Erwin 9.6, Azure Synapse Analytics, Azure Purview, Azure SQL Database (Azure SQL), Microsoft Azure DevOps, SQL Server Management Studio (SSMS) 20.1, Microsoft Visual Studio (SSIS), Power BI, Tableau, Redgate tool suite, Health Level Seven (HL7), FHIR, Epic Clarity, Epic Clarity Data Dictionary, Epic Caboodle, QNXT, HIPAA, Snowflake Cloud Data Warehouse, SQL, Visual Studio Code, Git, GitHub Desktop, Agile, Confluence, Alladin tool, Microsoft Visio tool, Microsoft 365 Apps for Enterprise, Microsoft Project 2016.

California Department of Health Care Services - Elk Grove, CA | June 2021- Nov 2023

Sr. Azure Data Modeler/Sr. Data Consultant

(California Department of Health Care Services provides care that includes medical, dental and mental health services to California’s incarcerated population at all 34 California Department of Corrections and Rehabilitation (CDCR) institutions statewide.)

- Identified source systems (SOMS, CERNER, Dentrix), tables and desired data elements for reports.
- Performed data analysis and data profile to get insights of source systems data set.
- Created data model objects and Azure Synapse services naming standards document.
- Designed Conceptual Data Model (CDM), Logical Data Model (LDM) and Physical Data Model (PDM) using ER/Studio tool and reviewed data models with project team.
- Updated table and column definitions in data model and generated data dictionary document.
- Generated data model DDL and deployed into Dev, Stage, UAT and Prod databases.
- Created Extract, Transform and Load (ETL) data flow diagram between source and sink databases.
- Created Source to Target Mapping (STTM) document with data quality and data transformation rules.
- Created reference tables with reference data, conformed dimensions, Slowly Changing Dimensions (SCD) and different type’s fact tables.
- Created Extract, Transform and Load (ETL), unit and system testing test cases and test plans.

- Developed SQL queries and verified data in dimension and fact tables to make sure data is accurate with high quality.
- Environment:** ER/Studio Data Architect 19.1, Azure Synapse Analytics, Azure Purview, SQL server 2019, Visual studio 2019, SQL Server Management Studio (SSMS) 18.9.2, SQL, Visual Studio Code, GitHub, Agile, Microsoft office 365, SOMS, CERNER, Dentrax.

County of Santa Clara Health System and County of Santa Clara Public Health Department- San Jose, CA | Oct 2018 – May 2021

Data Warehouse Architect/Sr. Data Consultant

(The County of Santa Clara Health System is local healthcare safety net and provider of comprehensive care, service and program to the residents of Santa Clara County. The Health System includes the Public Health Department, Behavioral Health Services Department, Santa Clara Valley Medical Center hospital and clinics, O'Connor Hospital, St. Louise Regional Hospital, Emergency Medical Services Agency, Custody Health Services Department and Valley Health Plan. Santa Clara County health officials dedicated to the health and well-being of all communities of County.)

- Worked with end users (Epidemiologists) team to get business requirements, use cases, prioritize project goals and maintain project tasks traceability matrix.
- Thoroughly understood PHI and HIPAA rules and regulations to meet organization compliance and patient data privacy requirements.
- Interacted with multiple SME's to understand source system business process.
- Designed data warehouse project Data Flow Diagram (DFW) using Microsoft Visio tool.
- Identified EMR, Epic Clarity, Epic Caboodle source systems and performed data discovery, data analysis and data profiling.
- Worked with department of family and children's services IT systems Child Welfare Services (CWS) and Case Management System (CMS).
- Designed Raw Vault (RV) and Business Vault (BV) data models using DbSchema tool for patients, encounters, providers, procedures, medications, labs, vitals, problem list, diagnosis, claims, coverage, enrollment, member, pharmacy subject areas.
- Generated DDL script and forward engineered Raw Vault (RV), Business Vault (BV) and Star schema data models into target databases.
- Designed Star schema data model using Erwin tool for billing, payment and insurance (VHP, SCFHP, Medicaid/Medical and Medicare) subject areas.
- Defined and maintained Raw Vault (RV), Business Vault (BV) and Star schema data models metadata, business and technical glossary, data dictionary and User Defined Properties (UDP).
- Reverse Engineered (RE) Epic Caboodle data model using ER/Studio tool.
- Heavily worked with Health Level Seven (HL7) and FHIR messaging specifications and standards documents to identify mapping for EMR/EHR data elements like patients, encounters, vitals, labs, diagnosis, problem list and claims.
- Created ETL transformations to move data from HL7/FHIR applications to SQL server database.
- Developed ETL process and loaded data from source and stage systems into target systems using Lambda architecture.
- Designed and developed Azure Purview, Azure Data Lake Store (ADLS), Azure Data Factory (ADF), Azure SQL DB and Azure Synapse Analytics services.
- Reviewed Epic Clarity compass comparison document and updated Raw Vault (RV), Business Vault (BV) and Star schema data models.
- Designed and deployed Data Vault (DV) security model.
- Created and maintained reference data tables on target database.
- Good knowledge in HIPAA policies, data privacy and California retirement pension policies.
- Worked with health care, payers, insurance and pension data to design Enterprise Data Warehouse (EDW) projects.
- Prepared, created and executed Unit and System test cases for HUB, LINK and SAT (Satellite) tables.

Environment: DbSchema 8.2, Erwin 9.6, ER/Studio, Microsoft Visual Studio (SSIS), Microsoft Azure DevOps, Power BI 2.81, Tableau 2018.1, Looker, IBM Mainframe, Adabas (Natural), Redgate tool suite, Health Level Seven (HL7), FHIR, CCWIS, Epic Chronicle, Epic Clarity, Epic Clarity Data Dictionary, Epic Caboodle, QNXT, HIPAA, Data vault Builder, Snowflake Cloud Data Warehouse, Lambda, Team Foundation Server (TFS), SQL, PL/SQL, Unix, Linux, UML, Visual Studio Code, GitHub, Agile, Prefect, DBT, Alladin, Microsoft Visio 2016, Microsoft Project 2016, Microsoft Office Suite 2016.

The University of Texas System (UT Austin), Austin, TX | Apr 2017 – Sep 2018

Data Warehouse Architect

(The University of Texas at Austin is a public research university, it is a flagship institution of the University of Texas System (UT System). UT Austin is one of the most selective universities in the region and consistently ranked among the country's top public universities. It is a major academic research institution in Texas State. It also offers innovative programs for promoting academic excellence and leadership development.)

- Coordinated with business architect team and IRRIS (Institutional Reporting, Research and Information Systems) team to get high level business requirements.
- Designed Star schema data marts and designed dimensional logical and physical models using Kimball and Data Vault methodology.
- Worked with IBM legacy systems in application and data modernization projects.
- Validated source data to identify data anomalies, data redundancy and understand data quality.
- Worked with Collibra Reference Data Accelerator to create reference data.
- Designed conceptual, logical and physical data models using Erwin v9.6 tool.
- Involved in Star and Snow flake schema for dimensional data models.
- Maintained different versions of data models using Erwin Mart feature.
- Designed data models for Master Data Management (MDM) project.
- Worked with big data technologies Hadoop, Spark implementation team.
- Designed Data Lake centralized repository system to store structured and unstructured data.
- Designed Data Lake system using Data Analytics as a Service (DAaaS) model.
- Designed dashboards, scorecards using Power BI tool.
- Created data base objects like Indexes, Views, Stored Procedures and Tablespaces.
- Reviewed business user reports and cubes using Cognos Power Play studio tool.

Environment: Erwin 9.6, ER/Studio, Oracle SQL developer data modeler 4.0, Oracle 11g, Oracle Exadata X6, Azure SQL DB, Azure Synapse Analytics (SQL DW), Snowflake Cloud Data Warehouse, Hadoop, Spark, Legacy IBM Mainframe System, Adabas (Natural), FASET System, SIS System, IBM Data Stage, IBM InfoSphere Quality Stage, Oracle SQL, Collibra, Lambda, Power BI, Tableau and Cognos Power Play Studio, Looker, JIRA Software, Agile, Unix, Linux, SQL, PL/SQL, Visual Studio Code, GitHub, UML and Microsoft Visio 2010, Microsoft Project 2010, Microsoft Office Suite.

Pharmaceutical Product Development (PPD Inc.), Morrisville, NC | May 2015 - Mar 2017

Sr. Data Architect

(Pharmaceutical Product Development (PPD) is a global Contract Research Organization (CRO) providing discovery, development and post-approval services for pharmaceutical, biotechnology, medical device, academic and government organizations. PPD is mainly known for conducting drug development for its clients, it also invests in developing new products through its compound partnering program.)

- Accumulated data model business requirements documented functional and technical specifications.
- Designed Conceptual Data Model (CDM), Logical Data Model (LDM) Entity Relationship Diagrams (ERD) using Erwin tool.
- Transformed logical data model into physical data model using Infosphere Data Architect (IDA) tool.
- Compared data model to database physical schema using compare feature in Infosphere Data Architect (IDA) tool.
- Generated physical data model from database by using reverse engineering feature in Infosphere Data Architect (IDA) tool.
- Documented design specifications of data marts, data warehouse logical and physical data models.
- Created and maintained Reference Data tables in clinical trials data environment.
- Enforced enterprise naming standards and data type standards in logical and physical data models using Infosphere Data Architect (IDA) tool.
- Hands on experience in maintaining and working on different versions of data models in a team environment.
- Designed Slowly Changing Dimension (SCD) tables.
- Created Source to Target Mapping (STTM) document for ETL development.
- Deployed Physical data models in target database and also deployed in virtualization environment using Db Visualizer Pro tool.
- Designed and created reports using Power BI tool.
- Designed and updated metadata for Data Lake model.
- Executed data definition and data manipulation operations for data analysis.
- Created query pairs in Query surge tool to test data in virtualization layer.
- Used Informatica Data Quality (IDQ 9.5.x) tool for data verification and data cleansing.
- Developed mappings using Informatica Data Quality (IDQ 9.5.x) transformations.
- Worked with IBM legacy systems in data platform modernization project.
- Executed Inserting, Updating and Deleting (I, U, D) test case against target database.
- Exported and prepared detailed unit and system test execution, bugs and defect reports using HPQC-ALM tool.

Environment: Erwin 9.6, Infosphere Data Architect (IDA), Oracle SQL developer data modeler 4.0, HPQC 12, Query Surge 4.0, Oracle 11g, Oracle Exadata X6, Teradata 12, Hadoop, Spark, IBM IMS database, Postgre SQL, MS Azure SQL server, SAP HANA, Informatica Powercenter 9.5, Oracle SQL developer 4.1, Db Visualizer Pro 9.2, Power BI, TIBCO Spotfire,

Collibra, CTMS system, Spark SQL, Oracle Clinical system, Health Level Seven (HL7), FHIR, SQL, PL/SQL, Python, R Studio, Unix, Shell script, Cisco Tidal scheduler, Microsoft office suite 2013.

North Carolina State Department of Transportation (NC DOT) Raleigh, NC | Nov 2014 – May 2015

Data Architect

(The North Carolina Department of Transportation (NCDOT) is responsible for issuing driver licenses, building, operating, repairing highways and maintaining different modes of transportations across North Carolina State.)

- Interacted with the project architect team on regular basis to gather requirements and discuss project milestones.
- Created Entity Relationship Diagrams (ERD), Functional Diagrams and Data Flow Diagrams (DFD's).
- Created Logical and Physical data models using Erwin and Power designer tools.
- Document Mater Data Management (MDM) Master Data Services (MDS) model standards and naming conventions.
- Designing Enterprise Information Management (EIM) Logical data model using Erwin tool and deploying Physical data model on target database.
- Worked in customer and product Master Data Management (MDM) projects.
- Deployed Master Data Services (MDS) model on target database.
- Creating XML, XSD, WSDL and NIEM schemas for Service Oriented Architecture (SOA) services.
- Heavily worked on data validation and Data quality methods, performed data profiling using SQL and other methods.
- Worked with Data Quality Services (DQS) tool to create data quality rules.
- Performed data stewardship roles like Implement data standards, create metadata and manage databases.
- Maintained security and data integrity of the database.
- Executed complex queries on source and target data base for data analysis and data validation.
- Involved in the maintenance of the database.
- Document the conversion processes, ensuring data accuracy and Integrity.
- Heavily used data conversion process techniques and methods to move data from legacy systems to SQL server database environment.
- Worked with the business in helping define & develop business rules, value maps, source to target data mapping documents and assisting ETL development team in development activities.

Environment: Erwin 9.5, ER/Studio, Oracle SQL developer data modeler, SQL server 2012, Teradata, PostgreSQL, Oracle10g, SAP HANA, MS Azure SQL server, SQL BI, Data Quality Services (DQS), IBM Data Stage, SQL server management studio 2012, Spark SQL, R Studio, MS Visio, SQL, PL/SQL, Python, XML, XSD, WSDL and NIEM schema, Agile, Unix, Microsoft Excel, Access 2010.

John Deere Moline, IL | Jun 2014 – Nov 2014

Sr. Data Modeler/Sr. Data Analyst

- John Deere & Company is an American corporation, it manufactures agricultural, construction and forestry machines, diesel engines, transmissions used in heavy equipment's and lawn care equipment's. John Deere also provides financial services and other business activities for customers.
- Interacted with the business users on regular basis to consolidate and analyze project requirements.
- Created conceptual, logical and physical data models using Infosphere Data Architect (IDA) tool.
- Used Normalization methods up to 3NF and De-Normalization techniques for effective performance in OLTP systems.
- Enforced Referential Integrity (R.I) for consistent relationship between parent and child tables.
- Generated Data Definition Language (DDL) script from physical data model using Infosphere Data Architect (IDA) tool.
- Extensively used Infosphere Data Architect (IDA) tool to create web reports from models.
- Reverse Engineered (R.E) target databases, identified new data elements in the source systems then added new data elements to the existing data models
- Compared data with original source documents and validated for Data Accuracy.
- Extracted large volumes of data feed from different data sources, performed transformations and loaded the data into various targets.
- Worked with Data Stewardship team to maintain data standards, performing data profiling operations against databases.
- Developed Data Migration and Data Cleansing rules for the integration architecture (OLAP, ODS, DW).
- Experienced in development of ETL mapping and scripts.
- Heavily used Pentaho Data Integrator (PDI) and Informatica Powercenter for migrating data from legacy database to new database.

Environment: Infosphere Data Architect (IDA), Power designer 16.5, IBM DB2, Teradata, Oracle10g, PostgreSQL, SQL server 2012, MS Azure SQL server, SAP HANA, Informatica powercenter 8.6, Pentaho Data Integrator (PDI), IBM Data Stage, OBIEE, Visual studio, Crystal reports, SQL server management studio 2012, Informatica Data Quality (IDQ), Trillium, Spark SQL, R Studio, SQL, PL/SQL, Unix, Linux, Toad for DB2, Scrum, Microsoft Excel, Access 2010.

JP Morgan Chase Columbus, OH | May 2011 - May 2014

Data Modeler/Data Analyst

- JP Morgan Chase is an American multinational banking and financial services holding company. It is the largest bank in United States. It is a major provider of financial services and it also providing services in investment management, wealth management, asset management and treasury and securities services.
- Demonstrated strong analytical skills in identifying and resolving data exchange issues.
- Used E.F Codd's Normalization methods 1NF, 2NF, 3NF and De-Normalization techniques for effective performance in OLTP and OLAP systems.
- Designed data models in Dimensional Modeling (D.M) environment.
- Have deep understanding of Know your Customer (KYC) procedures and standards.
- Executed user acceptance testing for Know your Customer (KYC) applications and KYC project's.
- Worked with Anti-Money Laundering (AML) partners and AML advisory team.
- Designed CDM, LDM, PDM data models for AML applications.
- Reviewed KYC documentation, worked as liaison between business and compliance AML teams.
- Created relational data models and populated reference data.
- Developing normalized Logical and Physical database models to design OLTP system for enterprise applications.
- Performing Forward Engineering (FE) operations to create a Physical data model with DDL that best suits requirements from the Logical data model.
- Developed data mapping, data governance and transformation and cleansing rules for the Master Data Management (MDM) Process.
- Executed enterprise data governance strategies in line with the organization's business strategy and objectives.
- Extensively used data quality tools to maintain consistent data.
- Convert data from multiple sources and run validation test on converted data.
- Thorough understanding and experience with the entire data migration process from analysis of existing data, cleansing, validation, translation tables, conversions and subsequent upload into new platform.

Environment: CA Erwin 9.5, Power Designer 16.5, Oracle10g, SQL server 2012, PostgreSQL, IBM IMS database, IBM DB2, Teradata, Informatica powercenter 8.6, OBIEE, Visual studio, SQL Server Management Studio (SSMS) 2012, Trillium, Informatica Data Quality (IDQ), IBM discovery, R Studio, Toad for DB2, SQL, PL/SQL, Unix, Agile, Microsoft Excel, Access.

N.C.E.T, India | June 2007 - Aug 2009

Database Analyst

- Created data model reports and Data Dictionary (D.D) by using Erwin tool.
- Executed SQL queries to retrieve data from databases for analysis purpose.
- Performed data quality comparison between development and virtualization environment using Query surge tool.
- Conducted meetings with DRB team for metadata approval.
- Executing unit and system testing for dimensional and fact tables using HPQC- ALM tool.
- Developed SQL scripts to validate data in target database.

Environment: CA Erwin tool, SSMS, SQL, HPQC- ALM tool, Microsoft Office, Windows.

8. Application SQL Server Database Administrator

Chandra Shekar, Application SQL Server Database Administrator

SUMMARY: Senior Database Administrator with over 18 years of experience managing and supporting enterprise SQL Server environments (2008–2019), including installation, configuration, and ongoing maintenance of mission-critical database systems. Highly experienced in database connectivity and integration, enabling reliable interaction between SQL Server platforms and complex, multi-tier applications. Proven track record of supporting development teams by debugging and optimizing T-SQL code—such as stored procedures, triggers, and functions—to ensure efficient and stable database-driven applications. Demonstrates strong expertise in SQL performance tuning and optimization, improving query execution and overall system performance in high-volume, high-demand environments. Possesses hands-on experience working in UNIX/Linux (RHEL, Solaris) systems, including developing and maintaining shell scripts to automate database operations, monitoring, and routine maintenance. Brings extensive knowledge of backup and recovery strategies, disaster recovery planning, and high-availability solutions to maintain data integrity and ensure continuous system availability.

EDUCATION & CERTIFICATIONS

- Master of Science (M.S.), Computer Science - Johns Hopkins University | August 2004 – May 2006
- Bachelor of Science (B.S.), Computer Science - University of Maryland – College Park | August 2000 – May 2004
- **Cloud & AI** -Google Associate Cloud Engineer, Introduction to Generative AI – Google Cloud Skills Boost,
- **CompTIA:** CompTIA Security+ CE, CompTIA Cloud+

- **Microsoft:** MCSE: Data Management & Analytics, MCSA: SQL Server 2012/2014, Microsoft Specialist – Design & Implement Cloud Data Platform Solutions, Microsoft Azure for Data Engineering, Azure Database Administrator Associate,
- **Oracle:** Oracle Certified Master Bronze – Oracle 10g Database Administrator, Oracle Cloud Database Services 2021 Certified Specialist, Oracle Certified Professional, Java SE 7 Programmer

PROFESSIONAL EXPERIENCE

DoD Programs Division- Washington DC |Jan 2018 – Present

Senior Enterprise Cloud Database Administrator

- Administered, secured, and optimized 200+ Oracle and SQL Server databases supporting DoD enterprise systems.
- Designed and deployed multi-cloud architectures using Azure SQL, GCP Cloud SQL, and OCI.
- Implemented advanced tuning using AWR, ASH, ADDM, SQL Plan Management, improving performance by 48%.
- Enforced STIG, RMF, and DoD IA compliance, ensuring adherence to IAT II requirements.
- Led cloud migration initiatives moving on-prem databases to Azure IaaS/PaaS.
- Developed PL/SQL, T-SQL, Bash, and Python automation for monitoring, maintenance, and reporting.
- Engineered JCL processes, access method structures, and storage allocation for high-throughput DoD systems.

Achievements

- Designed RAC + DataGuard HA architecture delivering zero downtime across primary and failover sites.
- Achieved 100% disaster recovery success using automated RMAN pipelines.
- Resolved CAT I/II vulnerabilities, achieving full database compliance with DoD audit requirements.

Northrop Grumman (Contract) - Norfolk, VA |2013 – 2018

Lead Cloud Database Engineer – Navy / Air Force

- Administered Oracle 12c/19c and SQL Server AlwaysOn for Navy ERP and Air Force systems.
- Performed high availability configuration, DataGuard management, and RAC tuning.
- Implemented encryption (TDE), RBAC, and database hardening for classified systems.
- Led storage tuning, ASM optimization, and performance diagnostics for mission-critical workloads.

Achievements

- Migrated Navy ERP databases to virtualized cloud infrastructure with zero data loss.
- Reduced system licensing and hardware costs by over \$1.2M through consolidation.

SAIC (Contract) - Arlington, VA | 2009 – 2013

Senior DBA – Department of Veterans Affairs & DHS

- Supported Oracle 11g, SQL Server, and PostgreSQL for federal healthcare and immigration systems.
- Performed database development, schema optimization, query tuning, and indexing improvements.
- Designed secure data access, auditing systems, and RBAC for federal data protection.
- Created metadata dictionaries, schema standards, and data modeling artifacts.

Achievements

- Increased system throughput by 55% through SQL optimization and storage restructuring.
- Designed cross-region replication improving COOP compliance for DHS systems.

CACI International - Aberdeen Proving Ground, MD | 2006 – 2009

Database Administrator – Army & Air Force Programs

- Installed, configured, and administered Oracle 10g/11g for battlefield and logistics systems.
- Built automated monitoring, backup, and performance reporting solutions.
- Supported Linux/Unix administration, JCL updates, and storage layout design.

Achievements

- Reduced database downtime from 6 hours/month to under 10 minutes using automated failover scripts.

9. PC Programmer Analyst

Samuel Apau, PC Programmer Analyst

SUMMARY: Samuel Apau is a highly experienced Software Engineer with over 14 years of expertise in developing, maintaining, and enhancing complex enterprise systems, making him a strong fit for the PC Programmer Analyst role. He holds a master's degree in software development and has extensive experience in database management, data processing concepts, and system design using technologies such as Azure SQL, PostgreSQL, and NoSQL databases. He has demonstrated strong capabilities in analyzing system requirements, developing work plans, and implementing scalable solutions through microservices and API-driven architectures. His experience includes documentation, project control practices, and system optimization, along with hands-on work in system maintenance and performance tuning. Additionally, he possesses excellent communication skills, regularly collaborating with cross-functional stakeholders including project managers, business analysts, and technical teams to deliver efficient and high-quality solutions.

EDUCATION, AWARDS & CERTIFICATIONS

- Master of Science (MS) – Software Development from Boston University, Boston, MA from January 2019 – May 2025
- Bachelor of Science (BS) – Accounting from George Mason University, Fairfax, VA in January 2009 – May 2011
- Dean's List – Recognized for academic excellence for five consecutive semesters
- Beta Alpha Psi Honor Society – Member (2010–2011), recognized for excellence in accounting, finance, and information systems
- **Microsoft Azure Certifications:** AZ-900 – Microsoft Azure Fundamentals, AZ-104 – Microsoft Azure Administrator, AI-900 – Microsoft Azure AI Fundamentals, SC-900 – Microsoft Security, Compliance, and Identity Fundamentals
- **Amazon Web Services (AWS) Certifications:** AWS Certified Cloud Practitioner, AWS Certified Solutions Architect – Associate, AWS Certified AI Practitioner

CORE COMPETENCIES

- AI-enabled application design and development
- Enterprise-grade .NET application engineering
- Intelligent virtual assistants and chatbot development
- Retrieval-Augmented Generation (RAG) system design
- AI agent workflows and orchestration concepts
- Secure API and microservices architecture
- Hybrid cloud and local AI inference solutions
- Performance tuning, latency optimization, and cost control
- Scalable, event-driven system design
- Azure-native application development
- CI/CD automation and DevSecOps implementation
- Cross-functional collaboration with AI, data, and DevOps teams
- Agile delivery and sprint-based execution
- Technical documentation and stakeholder communication
- Debugging, root cause analysis, and production support

TECHNICAL SKILLS

- **Programming Languages & Frameworks:** C#, .NET Core, ASP.NET Core, ASP.NET MVC, Python (FastAPI, Flask), Node.js, Java, Go, Rust, JavaScript, TypeScript
- **AI, GenAI & Machine Learning:** Azure OpenAI (Chat, Embeddings, Completions), Azure Cognitive Services (Text Analytics, Vision), Azure Cognitive Search (Semantic & Vector Search), RAG Architectures, LangChain, LlamaIndex, Prompt Engineering, Tool-Based LLM Workflows, ML.NET, TensorFlow, PyTorch, Hugging Face Transformers
- **Web & API Development:** RESTful APIs, GraphQL APIs, API-First Design, Async/Event-Driven Programming, OAuth 2.0, OpenID Connect (OIDC), JWT Authentication, Azure API Management
- **Azure & Cloud Services:** Azure Functions, App Services, Service Bus (Queues, Topics), Event Grid, Blob Storage, Key Vault, Azure Monitor, Application Insights
- **DevOps & Infrastructure:** Azure DevOps (Boards, Repos, Pipelines), GitHub Actions, Docker, Kubernetes (AKS), Terraform (IaC), Helm, ArgoCD, CI/CD Pipelines, DevSecOps (SAST/DAST)
- **Databases & Data Stores:** Azure SQL, PostgreSQL, MongoDB, Cosmos DB, DynamoDB, Cassandra, Redis (Caching), Vector Databases, Semantic Indexes
- **Messaging & Eventing:** Azure Service Bus, Kafka, Event Grid, Pub/Sub Architectures, Asynchronous Messaging
- **Frontend & UI (Supporting):** React, Angular, TypeScript, WebSockets, Server-Sent Events (SSE)
- **Testing & Quality:** Unit, Integration & End-to-End Testing, TDD, Jest, Cypress, Playwright, Postman, Newman
- **CRM & COTS Platforms:** Microsoft Dynamics 365 (Configuration & Customization), ASP.NET Core & Azure Integration, Role-Based Security, Workflow Automation, Data Model Extensions

PROFESSIONAL EXPERIENCE

Millennium Software | Sept 2024 – Present

Senior Software Engineer | Client: Ford Motors, Remote

- Designed, developed, and enhanced AI-enabled enterprise applications using ASP.NET Core, C#, and .NET libraries, supporting large-scale operational and analytics platforms.

- Built and maintained high-performance RESTful and GraphQL APIs using ASP.NET Core, implementing asynchronous programming patterns to ensure scalability, reliability, and responsiveness under high load.
- Integrated Azure AI Services, including Azure OpenAI and Azure Cognitive Search, to deliver intelligent features such as AI-powered analytics, contextual search, summarization, and conversational workflows.
- Designed and implemented Retrieval-Augmented Generation (RAG) pipelines, combining vector embeddings, semantic search, and structured data retrieval to improve accuracy and relevance of AI-generated responses across internal and customer-facing applications.
- Integrated local LLM models with RAG pipelines, leveraging vector databases and semantic search to deliver context-aware responses using internal enterprise knowledge bases.
- Configured and customized Microsoft Dynamics 365 components, integrating Dynamics entities, workflows, and business rules with custom ASP.NET Core and API-first microservices to support enterprise operational and reporting requirements.
- Developed intelligent agent workflows using Microsoft Semantic Kernel and AutoGen, automating multi-step research and task execution.
- Developed LLM-powered applications using LangChain and LlamaIndex, implementing prompt orchestration, memory management, and tool-based workflows to support complex AI use cases.
- Deployed local LLMs using Ollama in secure environments, enabling hybrid AI architecture.
- Reduced cloud inference costs by 25% by routing sensitive or low-complexity requests to local models while preserving compliance requirements.
- Built modular AI pipelines and agent-style workflows capable of interacting with APIs, databases, and enterprise systems to automate multi-step decision-making processes.
- Integrated vector databases and semantic indexing strategies to enable context-aware AI responses over large volumes of enterprise data.
- Developed and deployed hybrid AI solutions, supporting both cloud-hosted AI models on Azure and local or controlled inference environments for secure and low-latency use cases.
- Architected and implemented API-first microservices using ASP.NET Core, Python Flask, and Node.js, enabling seamless communication between AI models, backend services, and enterprise systems.
- Built event-driven architectures using Azure Service Bus and Azure Event Grid, enabling asynchronous workflows, reliable message processing, and system decoupling.
- Implemented secure authentication and authorization using OAuth 2.0, OpenID Connect, JWT, and Azure API Management (APIM) to protect AI and enterprise APIs.
- Optimized AI model performance, inference latency, and operational cost, applying caching, batching, retry policies, and efficient data access patterns.
- Developed serverless components using Azure Functions to process AI events, background tasks, and message-driven workflows at scale.
- Implemented enterprise-grade secret management using Azure Key Vault and managed identities, eliminating hardcoded credentials and ensuring compliance with security standards.
- Built observability and monitoring solutions using Azure Monitor, Application Insights, Grafana, and CloudWatch, tracking AI latency, API health, message throughput, and system reliability.
- Collaborated closely with AI engineers, data scientists, DevOps teams, and business stakeholders to translate functional requirements into scalable technical solutions.
- Participated actively in Agile delivery, contributing to sprint planning, backlog grooming, design discussions, and delivering incremental improvements in 3-week sprint cycles.
- Produced weekly status updates, technical documentation, and architecture artifacts, ensuring transparency, traceability, and knowledge sharing across teams.
- Applied DevSecOps practices, including automated testing, CI/CD pipelines, vulnerability scanning, and policy enforcement using Azure DevOps and GitHub Actions.
- Conducted code reviews, performance tuning, and root cause analysis, improving system stability, reducing production incidents, and accelerating release cycles.

AT&T, Remote | May 2022 - Sep 2024

Lead Software Engineer

- Designed and delivered AI-driven conversational applications and intelligent automation workflows, supporting enterprise-scale user support and operational use cases.
- Built and maintained LLM-powered conversational systems using Microsoft Copilot Studio, integrating custom actions, connectors, and enterprise data sources to provide real-time, context-aware responses.
- Developed secure, scalable backend services using ASP.NET Core / .NET Core and C#, enabling AI capabilities to be consumed by existing enterprise applications through well-defined REST and gRPC APIs.

- Integrated Azure OpenAI and other cloud-based LLM services into production systems, implementing prompt control, response validation, rate limiting, and logging to ensure reliability and responsible AI usage.
- Designed and implemented intent classification, entity extraction, and prompt routing logic, enabling accurate mapping of user requests to appropriate workflows and backend systems.
- Led configuration and customization of Microsoft Dynamics–based CRM workflows, extending forms, entities, plugins, and integrations to align Dynamics with enterprise authentication, AI-powered automation, and backend service orchestration.
- Developed monitoring and logging frameworks for Ollama-based LLM services using observability tools to track model performance, request throughput, latency, and error handling.
- Developed AI-enabled APIs that wrapped LLM functionality behind secure service layers, allowing multiple internal systems to adopt AI features without architectural disruption.
- Implemented Retrieval-Augmented Generation (RAG) patterns, combining enterprise data sources with LLM responses to improve accuracy, reduce hallucinations, and ensure domain-correct answers.
- Built asynchronous, event-driven workflows to orchestrate AI requests, background processing, and downstream system integrations, ensuring high availability and fault tolerance.
- Integrated OAuth 2.0 and OpenID Connect (OIDC) authentication and authorization mechanisms to secure AI services and APIs, enforcing enterprise identity and access policies.
- Leveraged Azure API Management (APIM) to expose AI-enabled APIs, applying throttling, security policies, and traffic management for enterprise-scale consumption.
- Implemented observability and monitoring using Azure Application Insights and Azure Log Analytics, tracking AI response latency, error rates, and usage patterns to maintain SLA compliance.
- Optimized AI system performance and scalability, reducing response times and improving throughput for high-volume conversational workloads supporting tens of thousands of users.
- Collaborated closely with AI engineers, platform teams, security teams, and business stakeholders to design AI solutions that met functional, security, and compliance requirements.
- Participated in Agile delivery cycles, contributing to sprint planning, backlog refinement, demos, and retrospectives while delivering incremental AI and backend enhancements.
- Provided regular status updates, technical documentation, and architectural guidance, ensuring transparency and consistency across distributed teams.
- Developed intelligent agent workflows using Microsoft Semantic Kernel and AutoGen, automating multi-step research and task execution and reduced manual processing time by 50% and accelerated decision workflows across business teams.
- Conducted code reviews, technical design reviews, and mentoring, promoting best practices in .NET development, API design, and AI integration.
- Supported production deployments and incident resolution, performing root cause analysis and implementing corrective actions to improve system stability and reliability.

Artech LLC (IBM) | Nov 2020 - May 2022

Senior Software Engineer

- Developed React and Node.js–based applications to display live telemetry and operational data from distributed systems, ensuring sub-second updates and smooth real-time user experiences using WebSocket's.
- Built high-performance backend services in Rust to support real-time data ingestion and event processing pipelines, focusing on low latency, high throughput, and system reliability.
- Engineered safe, concurrent Rust modules leveraging Tokio async runtime, improving performance and scalability of distributed services interacting with high-volume data streams.
- Implemented memory-efficient Rust components to handle compute-intensive workloads, reducing resource usage while maintaining consistent performance under load.
- Supported Microsoft Dynamics CRM configuration and customization, including entity modeling, workflow automation, and secure API integrations, enabling seamless data exchange between Dynamics, cloud services, and custom enterprise applications.
- Designed and deployed Rust-based microservices supporting enterprise APIs, ensuring strong type safety, predictable behavior, and fault tolerance.
- Developed and maintained Python microservices using FastAPI and Flask, handling high-volume REST and GraphQL traffic with structured logging, authentication middleware, and robust error handling.
- Built custom middleware layers for authentication, request tracing, and error normalization, improving observability and consistency across backend services.
- Reduced average API latency and improved service reliability by optimizing request handling, concurrency patterns, and backend integrations.

- Designed and implemented RESTful APIs and microservices using .NET Core, Node.js, Python, and Go, supporting secure enterprise integrations and data exchange.
- Integrated backend services with relational and NoSQL databases, applying optimized data access patterns to ensure efficient query execution and reliable data storage.
- Implemented real-time communication mechanisms using WebSockets, enabling continuous streaming of telemetry and event data to frontend applications.
- Collaborated closely with frontend engineers, backend developers, and infrastructure teams to deliver cohesive, end-to-end solutions supporting IBM enterprise systems.
- Participated in Agile development practices, including sprint planning, daily stand-ups, backlog grooming, and iterative feature delivery.
- Conducted code reviews and technical discussions, ensuring adherence to coding standards, performance best practices, and maintainable architecture.
- Assisted with production deployments, monitoring, and troubleshooting, supporting operational stability and timely resolution of issues.
- Documented API contracts, system behaviour, and technical decisions, supporting knowledge transfer and long-term maintainability of enterprise applications.

Linkett (Independent Contractor), Remote | Apr 2016 – Nov 2020

Software Engineer

- Developed high-throughput Rust microservices handling real-time financial transactions with 99.99% uptime. Optimized service concurrency and memory safety, reducing latency by 30%.
- Built high-performance backend services in Rust, leveraging async runtimes (Tokio/Actix) to reduce latency and improve throughput for real-time data pipelines.
- Implemented memory-safe, zero-cost abstractions in Rust, eliminating entire classes of concurrency bugs and improving system stability.
- Built high-throughput microservices and APIs in Rust, Java, Python, C#, .NET, Node.js, and Go, delivering secure financial, healthcare, and eCommerce applications with sub-second latency and 99.99% uptime. Optimized concurrency, memory safety, and query execution to cut processing times by 30–40%.
- Designed modular Ruby on Rails application architecture, enhancing maintainability and accelerating feature delivery.
- Developed automated test suites in RSpec for Ruby on Rails applications, increasing test coverage to 92% and minimizing production defects.
- Collaborated with front-end teams to integrate React with Ruby on Rails, enabling dynamic interfaces and reducing development cycle time.
- Developed lightweight C++ daemons deployed on Kubernetes worker nodes to monitor system calls for anomaly detection. Integrated results with Rust-based detection pipelines for near real-time mitigation.
- Developed responsive web and mobile apps with React, Angular, Vue.js, Ember.js, React Native, TypeScript, and JavaScript, ensuring accessibility (WCAG/508/ADA), cross-browser compatibility, and real-time dashboards for analytics and operations. Designed eCommerce and financial portals reaching 1M+ active users.
- Designed and deployed multi-cloud systems on AWS (Lambda, API Gateway, CDK, ElastiCache, Aurora), Azure (App Services, Event Grid, Functions), and GCP. Built serverless microservices handling 100k+ daily requests and implemented event-driven architectures with real-time streaming and caching.
- Embedded QuickSight dashboards directly into customer-facing and internal applications using the Embedding SDK. Built a reusable embedding module for rapid integration. Ensured secure authentication via IAM and STS session tokens. Result: boosted application engagement by 50% and reduced requests for ad hoc reports by 65%.
- Established pipelines with GitHub Actions, Jenkins, Azure DevOps, ArgoCD, Helm, SonarQube, Fortify, and Checkmarx, embedding SAST/DAST scans, automated testing (Cypress, Jest, NUnit), and GitOps workflows. Reduced deployment errors, accelerated onboarding, and improved release reliability by 60%.
- Containerized workloads with Docker, Kubernetes, OpenShift, and Istio, enabling auto-scaling, traffic routing, service mesh security, and fault tolerance. Migrated legacy apps to modern container platforms with Helm charts.
- Built predictive analytics pipelines with TensorFlow, Kubeflow, Airflow, Kafka, and event-driven ETL on Kubernetes. Designed SQL/NoSQL data models (Aurora, PostgreSQL, Cassandra, MongoDB, Elasticsearch, GraphQL) for large-scale reporting and real-time processing on 10M+ records.
- Integrated monitoring with Datadog, CloudWatch, Prometheus, and WebAssembly dashboards, reducing incident response time by 40%. Enforced PCI-DSS compliance, vulnerability remediation, and automated security scans across pipelines, resolving 95% of issues pre-production.
- Created documentation, templates, and reusable abstractions for telemetry and orchestration across domains (networking, video, gaming). Mentored developers in API design, SQL optimization, and cloud workflows, improving delivery speed and maintainability.

Wercker, Alexandria, VA | July 2011- Apr 2016

Software Engineer

- Built responsive web and mobile apps with React, Angular, React Native, TypeScript, HTML5, CSS, and JavaScript; ensured WCAG/ADA/Section 508 compliance and delivered apps rated 4.7+ on iOS/Android.
- Developed and implemented test plans and cases to test server features and performance of distributed system on premises as well as on cloud.
- Implemented multi-environment CI/CD with CircleCI and Terraform, automating environment provisioning and rollback logic. The solution provided traceability across builds, leading to a 98% reduction in manual intervention during releases.
- Implemented authentication, authorization, and role-based access controls in PHP applications, enhancing data security and compliance.
- Integrated payment gateways using PHP, improving transaction reliability and reducing support tickets by 25%.
- Created automated test scripts with PHPUnit for PHP, raising coverage to 90% and ensuring robust deployments.
- Designed real-time reporting dashboards using PHP and JavaScript, enabling executives to track key metrics efficiently.
- Designed and executed test plans/cases for distributed systems on-prem and cloud; automated unit, integration, and E2E tests (JUnit, xUnit, Jest, Detox), achieving 85%+ coverage and preventing regressions.
- Optimized Apollo Client queries, caching, and subscriptions for real-time updates, reducing network usage by 20% and improving responsiveness under poor connectivity.
- Developed scalable microservices and APIs with Python (FastAPI), Java (Spring Boot), .NET Core, and C#, implementing authentication, payments, reporting, and IVR call center systems handling millions of requests monthly.
- Developed full-stack serverless applications using Amplify CLI, GraphQL (AppSync), Cognito, and S3. Integrated React UIs with Amplify libraries for secure access and real-time data. Standardized multi-environment builds for consistent deployments. Result: accelerated development velocity by 35% and reduced backend setup time by 80%.
- Migrated services to AWS, Azure, and OpenShift; provisioned infrastructure using Terraform, Ansible, and Helm; deployed Kubernetes clusters (AKS/EKS) with standardized Helm charts for reproducible, rollback-capable deployments.
- Automated builds with Maven/Gradle and Azure DevOps pipelines; integrated SonarQube, Nexus, and code linting; reduced deployment failures and accelerated release cycles by 40%.
- Built secure file upload/download workflows using S3, CloudFront, and Amplify Storage policies. Added pre-signed URL handling for restricted access. Optimized edge caching for faster delivery. This improved asset load speed by 40% globally and reduced S3 request costs by 25%.
- Authored Terraform modules for Azure and AWS, enabling version-controlled, repeatable deployments across networking, Kubernetes, and monitoring. Migrated ARM to Bicep for simplified IaC.
- Implemented OAuth 2.0, SAML, and Azure AD for API security and RBAC; embedded secure coding practices to meet enterprise compliance standards.
- Debugged performance bottlenecks using Flipper, React DevTools, and Crashlytics, reducing app crashes by 30%. Integrated observability with Prometheus, ELK, and Datadog.
- Collaborated with designers via Figma handoffs to deliver pixel-perfect UI; authored detailed technical documentation and onboarding guides to accelerate team adoption.

10. Senior PC Programmer Analyst

Arkady Vilpan, Senior PC Programmer Analyst

SUMMARY: Arkady Vilpan is a highly experienced Senior .NET Developer with over 20 years of hands-on expertise in designing, developing, and supporting enterprise-level applications, making him an excellent fit for the Senior PC Programmer Analyst (.NET/C#) role. He has extensive experience working within federal government environments, including the Defense Counterintelligence and Security Agency (DCSA) and the Department of Veterans Affairs, where he contributed to mission-critical systems and large-scale modernization initiatives.

His technical strengths include advanced proficiency in C#, .NET Core, ASP.NET, and SQL Server, with deep experience in building secure, scalable, and high-performance applications. He has worked across the full software development lifecycle, including requirements analysis, architecture, development, testing, deployment, and production support. Arkady also brings strong experience in API development, microservices, cloud platforms (AWS/Azure), and CI/CD pipelines.

In addition, he has played key roles in security remediation efforts to achieve Authority to Operate (ATO), demonstrating his ability to work in highly regulated environments. His combination of technical depth, federal domain experience, and active clearance makes him a low-risk, high-value candidate ready to contribute immediately in a government-focused engagement.

EDUCATION

- CSC Institute, Philadelphia, PA | Diploma in computer programming
- Brooklyn College, New York, NY | Executive business training
- Financial University under the Government of the Russian Federation, Moscow, Russia | M.S., Banking and Finance
- Moscow State Polytechnic University, Moscow, Russia | M.S., Mechanical Engineering

CORE COMPETENCIES

- Designing and supporting Internet applications

- Extensive experience in Microsoft environment, .Net, Object Oriented Programming
- Thorough knowledge of SQL languages. Maintain and support of different types of databases and database operations
- Experience with different types of web services
- Project QA and testing
- Remediation of findings from code audit and fix security issues
- CI/CD pipeline software delivery from code changes to deployment
- AI tools implementation
- Analyzing, modernization and improving system efficiencies
- Mentoring junior developers
- Interfacing with clients

TECHNICAL SKILLS

- **Programming Languages:** Visual Basic .NET/6.0/VBA, C#, HTML5/HTML, CSS3/CSS, ASP.NET Core/ASP.NET, MVC ASP.NET, VB Script, Java Script
- **Databases:** SQL Server, Oracle, Access, Entity Framework, PostgreSQL
- **Development Tools:** Active X Technologies, Object Oriented Data Base Tools, DAO, RDO, ADO NET, ODBC, SQL (SQL*PLUS, PL/SQL, Jet SQL, T SQL, LINQ), SSIS, DbVisualizer, TOAD, Erwin, OLAP, ETL, DTS, Citrix, Visio, Visual Studio.NET, .NET Framework, .NET Core, Visual SourceSafe, Subversion source control(SVN), TFS, Git, GitHub, GitHub Copilot, Gitlab, CI/CD pipelines, Serena Dimensions, Jira, Microsoft Teams, Visual InterDev, Visual Web Developer, Cold Fusion Studio, IIS, Photoshop, Site Server, Terminal Server, MTS, API Functions, SSRS, Active Reports, Crystal Reports, Business Objects, Developer 2000 Forms, VMware Workstation, Extra!X-treme, Clear Case, Sandcastle Help File Builder, Web services, SOAP, WCF, REST, AWS, Azure, Web API, Web logic, IMB Optim, Iron Speed Designer, BPM/EPM systems, Agile/Scrum, AngularJS, Bootstrap, jQuery, AJAX, XML, JSON, Unit Tests, Serilog, Aspose, PdfiumViewer, ClosedXML, XmlWriter, Telerik, Fortify Static Code Analyzer, Nexus cybersecurity, AI tools
- **Operating Systems:** Windows 11/10, UNIX.

PROFESSIONAL EXPERIENCE

DEFENSE COUNTERINTELLIGENCE AND SECURITY AGENCY (DCSA), Quantico, VA | 11/2022 – Present

Sr. .NET Developer

Design, develop, test and support applications for DCSA as a part of the AD&I (Agency Delivery/Imaging) team.

Use: Visual Studio.NET 2022/2019, .NET Framework, .NET Core, C#, VB.NET, ASP.NET/Core/Razor Pages/MVC, HTML/CSS, Angular JS, Entity Framework, SQL Server 2019/2017, Oracle 21, PostgreSQL, LINQ, T-SQL, PL SQL, DbVisualizer, Toad, GitHub, GitHub Copilot, Gitlab, CI/CD pipelines, Jira, Microsoft Teams, Web services, SOAP, WCF, REST, AWS, Azure, Web API, Nexus, Postman, Swagger, VISIO, Unit Tests, Agile/Scrum, Telerik, AI tools.

- Work with internal company's applications: Commit Monitor, eDelivery, Index Updater, Document Import Service, Document Conversion Service, Document Import Web, eFR, eQIP Document Conversion Service, IVT, Retention Web Services, Retirement, Oliver
- Work with Nexus cybersecurity tool to remediate security scan finding in order to obtain Authority to Operate (ATO)
- Develop and provide all documentation relating to any work performed and adhere to both internal programming documentation and external documentation standards in the form of documentation booklets and/or online methods of documentation
- Resolve problems with software and responds to suggestions for improvements and enhancements. Acts as team member on projects
- Prepare and edit functional specifications, user manuals, technical documentations for application users and developers
- Provide customer training and support

DEPARTMENT OF VETERANS AFFAIRS INSURANCE SERVICE (VA), Philadelphia, PA | 10/2017 – 11/2022

Sr. .NET Developer

Involved in all phases of software development life cycle (SDLC), from requirements gathering, analysis, design, development, testing, implementation, and production support maintained by the Insurance Development Team for OI&T (Office of Information and Technology) of Department of VA. The team was the advanced group of software developers involved in the various VA modernization and transition projects (such as LIPAS - Life Insurance Policy Administration Solution) in the IPL (Insurance Product Line) Department. The team saved millions of dollars of US Government funds by modernizing various VA applications internally.

Provided web, databases, .NET programming and corporate products support. Acted in a lead role interfacing daily with customers and senior management daily. Responsible for the Security Remediation projects, critical for obtaining Authority to Operate (ATO).

Used: Visual Studio.NET 2022/2019, .NET Framework, .NET Core, C#, VB.NET, ASP.NET/Core/Razor Pages/MVC, HTML/CSS, Angular JS, Entity Framework, SQL Server 2019/2017, Postgre 14, LINQ, T-SQL, Serena Dimensions, GitHub, Jira, Microsoft Teams, Web services, SOAP, WCF, REST, AWS, Web API, Postman, Swagger, VISIO, Unit Tests,

Sandcastle Help File Builder, IBM Rational, Agile/Scrum, Serilog, Aspose, PdfiumViewer, ClosedXML, XmlWriter, Telerik, Micro Focus Fortify Static Code Analyzer

Supported Electronic Insurance (EIN/WEB), a following suite of web applications/services for VA/Insurance to support the internal (Insurance) as well as external (Veterans) customers.

- Insurance Online: Insurance Online is the Veteran- facing (External Customer) online presence for Insurance with a suite of Insurance-application such as apply for Service-Disabled Veterans Insurance (SDVI), Self-Service (Online Policy Access), Insurance needs calculator, Document Upload, etc. SDVI allows veterans with a rating for a new disability to apply for SDVI online. Online Policy Access allows veteran to Self-Service their information. Variety of different Pdf, XML and Excel forms generation projects. Web services-based projects (LIPAS data sources)
- Insurance Unclaimed Funds: Insurance unclaimed funds allow the public/veteran (External Customer) to search a database of unclaimed funds by name (the original policyholder's name) to see if Insurance might be holding a returned check or other unclaimed liability
- Insurance Collection: Insurance Collections is a suite of features supporting the collections department of Insurance (Internal Customer) for processing Veterans policy payments, it is used internally by Insurance specialists. It Contains tools for payment processing via Pay.gov for Pre-Authorized Debits (PADS) and for online bill pay via the US banking system
- Insurance Dashboard: Insurance Dashboard is a portal that provides customized reports for Insurance staff (Internal Customer) regarding various benefits provided to Veterans. The portal displays different information, graphs, analysis and personal data of the OPA (On-line Policy Access) system to analyze collected data and to manage a marketing campaign, based on the different custom or preset periods of time, and that allows to export reports' data in MS Excel files
- Insurance Services: Insurance Services is s suite of Insurance-related web services to provide common access point for Insurance business functionality (Internal Customer). It provides ability to expand and/or consolidate functionality when required by the Insurance business
- Insurance Service API Document Management: System that processes document images from both internal and external sources and then retrieve them on demand for consumption
- VICTARS (Veterans Insurance Claims Tracking and Response System): The Insurance policy maintenance application used to create and view documents
- PrintBnO: Printing and document management application
- Insurance Service API Workflow: Application that checks on the schedule services' status and moves documents stored in SQL server databases to the production system of record
- Insurance Beneficiary Management: Web application that allows user to update their beneficiary designation online, store data in a database and to printout all required forms in different document formats
- SDVI (Service-Disabled Veteran Insurance) – LIPAS (Life Insurance Policy Administration Solution): Integration and communication implementation of online SDVI application confirmation and LIPAS system
- Fortify Static Code Analyzer: Remediation of findings from Fortify tool scans in order to get ATO (Authority to Operate) for the EIN applications and to find, and to fix security issues
- VA Notify service: Service managing emails and SMS messages notifications for VA by using AWS.
- Performed Quality Assurance testing and implementation for applications and products
- Prepared and edited functional specifications, user manuals, and technical documentations for application users and developers
- Provided customer training and support

SALLIE MAE, Newark, DE | 06/2011 – 10/2017

Sr. Systems Programmer

Develop, design and support following applications for the Distributed Technology Solutions (DTS) department of Sallie Mae Corporation, the nation's No. 1 financial services company specializing in education.

Used: C#, VB.NET, ASP.NET, ASP.NET MVC 5/4, Java script, HTML5/CSS3, jQuery, AJAX, IIS 7, Iron Speed Designer, SQL Server 2012, Oracle, Entity Framework, Web services, SOAP, REST, WCF, Web API, LINQ, SSIS, SVN, TFS, Git, FTP, EDI, PDF, XML/XSLT, JSON, Excel/flat/email files parsing and generation, SSRS, Business objects, Excel reports, SQL Server/ESP jobs scheduler, Sony Sound Forge Audio Studio, Agile/Scrum, SMTP, files, Angular JS, Bootstrap, Agile/Scrum.

- Bankruptcy system - web and windows forms applications, interfaces, and tools that process the flow of legal documentation from U.S. courts related educational loan bankruptcy cases
- Shift Bid system - SDLC web-based email and report system that allows agents and supervisors to select future work schedules based on past performance rank
- IVR (Interactive Voice Response) system - web-based system that analyzes customers satisfaction and statistics after contact with customer service
- IBM Optim – supported and managed data archiving and client NPPI obfuscating system
- BPM/EPM systems support

- Ad-hoc support for 40 different department applications
- Quality Assurance, testing, and implementation of developed applications and products
- Managed design, preparation, and editing of functional specifications, user manuals, technical documentations and database schemas for users and developers
- Created and modified various application reports (Access, Excel, Business Objects, Crystal Reports, Oracle Reports, SSRS, etc.)
- Served as Technical Team Lead for offshore developers
- Provided customer training and support. Work directly with end users to collect requirements, develop mockups, deploy final products and ensure client satisfaction. Implemented software applications that reduced cost by eliminating manual processes.

ADDITIONAL EXPERIENCE

THE BANK OF NEW YORK MELLON, Malvern, PA | 07/2007 – 06/2011

Sr. Software Developer

SEI INVESTMENTS, Oaks, PA | 06/2006 – 06/2007

Sr. Software Developer

SCHERING-PLOUGH/GLOBAL ANIMAL MANAGEMENT (GAM), Union, NJ | 04/2003 – 05/2006

Software Developer

JCDECAUX USA, Englewood, NJ | 09/2000 – 03/2003

Software Developer

NETREACH, INC., Ambler, PA | 03/2000 – 09/2000

Internet Programmer

INDEPENDENT CONSULTING SERVICES, INC., Philadelphia, PA | 01/1999 – 03/2000

Programmer/ Analyst

CREDIT-MOSCOW BANK, Moscow, Russia | 09/1995 – 12/1998

Programmer/ Analyst

C&M, INC., New York, NY | 01/1991 – 08/1995

Assistant portfolio manager

CREDIT-MOSCOW BANK, Moscow, Russia | 09/1988 – 01/1991

Assistant Fund manager, Analyst

11. GIS Database Administrator

Israel Ropo Orimoloye, GIS Database Administrator

SUMMARY: GIS professional with extensive experience supporting enterprise geospatial systems, including hands-on work with ArcGIS Enterprise environments, enterprise geodatabases, and relational database platforms such as SQL Server and Oracle Spatial. Experienced in managing large-scale, multi-user GIS datasets while ensuring data integrity, consistency, and compliance with spatial data standards through rigorous QA/QC processes. Demonstrates strong capability in configuring and supporting connectivity between GIS platforms and enterprise databases, enabling reliable integration within organizational data infrastructures. Proven in supporting GIS analysts and developers by troubleshooting geoprocessing workflows, debugging Python and ArcPy scripts, and resolving issues related to spatial queries and database-driven GIS processes. Possesses solid knowledge of spatial SQL and enterprise geodatabase structures, with experience in data validation and workflow optimization. Skilled in designing and optimizing complex GIS workflows involving parcel, zoning, infrastructure, and environmental datasets. Proficient with ArcGIS Pro, ArcGIS Online, and ArcGIS Enterprise, as well as structured data management practices including metadata standards, topology rules, version management, and support for backup and restoration processes.

EDUCATION, CERTIFICATIONS & ACHIEVEMENTS

- Ph.D. in Geography, University of Fort Hare, South Africa
- M.Sc. in Geographic Information Science (GIS), University of Cincinnati, USA M.Tech. in Meteorology (GIScience Focus), Federal University of Technology, Akure B.Tech. in Meteorology (GIScience Focus), Federal University of Technology, Akure
- Python for Data Science
- Spatial Data Science and Applications

- GIS and GPS Applications
- ESRI: ArcGIS Enterprise Systems & Lifecycle
- ESRI: ArcGIS Online Mapping and Data Management
- Designed and validated complex GIS workflows involving parcel and zoning data.
- Converted and quality-checked 10,000+ spatial assets with >99% accuracy.
- Reduced geospatial data errors by 30% through structured QA/QC processes.
- Automated GIS workflows, saving 20+ hours per month.
- Created and produced more than 50 maps per week.

TECHNICAL SKILLS

- **GIS & Spatial Analysis:** Parcel and zoning analysis, land-use research, urban and environmental GIS, spatial reasoning, multi-step GIS workflow design and validation
- **GIS Platforms & Data Sources:** ArcGIS Pro, ArcGIS Enterprise, ArcGIS Online, QGIS, Government GIS portals, U.S. Census Bureau, USGS, municipal spatial databases
- **Data Management & QA/QC:** SQL Server, Oracle Spatial, Enterprise Geodatabases, Metadata Standards, Topology Rules, Data Validation, Accuracy Assessment
- **Programming & Automation:** Python, ArcPy, ModelBuilder, Reproducible Geoprocessing Workflows
- **Research & Communication:** Analytical Task Design, Rubric Development, Technical Documentation, Structured Evaluation, Strong Written & Verbal Communication

PROFESSIONAL EXPERIENCE

Government of San Juan County, New Mexico, USA | Oct 2025 – Present

GIS Consultant / Manager

- Lead countywide GIS operations with emphasis on analytical accuracy and real-world applicability.
- Design and review complex GIS workflows involving parcels, zoning, infrastructure, and multi-agency datasets.
- Administered enterprise geodatabases using ArcSDE technology on SQL Server and Oracle
- Managed database users, roles, schemas, and permissions for multi-user GIS environment
- Optimized spatial SQL queries using indexing strategies (R-tree, spatial indexes)
- Translate planning, policy, and operational questions into structured spatial analysis tasks.
- Evaluate geospatial outputs for correctness, completeness, and analytical rigor.
- Collaborate asynchronously with internal teams, agencies, and vendors on research-driven GIS initiatives.

Apple Inc., Austin, TX | May – Oct 2025

GIS & QA/QC Analyst

- Performed detailed QA/QC on large-scale spatial datasets supporting infrastructure systems.
- Implemented database replication and synchronization for GIS environments
- Validated spatial accuracy, attribute consistency, and metadata compliance.
- Reviewed multi-step GIS workflows to ensure logical correctness and reproducibility.
- Produced analytical maps and reports for internal evaluation and decision-making.

Western Michigan University, Michigan, USA | 2023 – 2025

GIS Administrator & Coordinator

- Managed GIS datasets supporting urban planning, utilities, and infrastructure analysis.
- Developed and documented GIS workflows for research and operational use cases.
- Supported navigation and extraction of data from government and institutional GIS portals.
- Conducted spatial analysis and QA/QC in project-based, independent work environments.
- GIS & Remote Sensing Specialist
- University of the Free State – Centre for Environmental Management, South Africa | 2016 – 2023
- Designed and executed spatial analyses for land-use planning and environmental research.
- Managed parcel, zoning, land ownership, and environmental GIS datasets.
- Supported disaster recovery planning and database restoration procedures
- Debugged stored procedures and spatial SQL queries supporting GIS workflows
- Interpreted survey data, satellite imagery, and engineering plans to create GIS-ready datasets.
- Developed Python scripts to automate repeatable geospatial analysis workflows.

12. Senior GIS Database Administrator (ArcGIS Enterprise Administration)

Mary Meraz, Senior GIS Database Administrator (ArcGIS Enterprise Administration)

SUMMARY: GIS professional with over 15 years of experience managing and supporting enterprise geospatial systems, specializing in ArcGIS Enterprise, ArcSDE, and SQL Server-based geodatabases. Demonstrates proven expertise in designing, implementing, maintaining, and optimizing multi-user GIS database environments that support large-scale

organizational operations. Highly experienced in configuring and maintaining connectivity between GIS platforms and enterprise databases, including ArcGIS Server, WMS/WFS services, and web-based GIS applications, enabling seamless data integration and effective data dissemination across departments and stakeholders. Possesses strong skills in troubleshooting and debugging complex geospatial workflows, spatial queries, geoprocessing scripts, and database-related issues, while enforcing robust QA/QC processes to ensure data accuracy, consistency, and reliability. Brings a solid background in enterprise database administration, including geodatabase design, performance tuning, indexing, user and permission management, patching, and routine maintenance. Experienced in managing GIS infrastructure, data migrations, metadata automation, and developing Python and SQL scripts to streamline operations. Recognized for leadership in mentoring teams, supporting enterprise GIS initiatives, and delivering scalable, high-quality geospatial solutions across government, utilities, and environmental sectors.

EDUCATION

- Masters Certificate Program, Major GIST, Los Angeles CA University of Southern California Dec 18, 2013 (G.P.A. 3.7/4.0)
- Bachelor of Arts, Major Environmental Science, Whittier, CA Whittier College May 25, 2007 (G.P.A.3.7 / 4.0)
- Associates of Science, Major Environmental Tech, Whittier, CA Rio Hondo College June 22, 2005 (G.P.A. 3.8 / 4.0)

CORE COMPETENCIES

- Designing, implementing, tuning, and analyzing geospatial databases using SQL Server, PostgreSQL, distributed databases, enterprise geodatabases, ESRI File Geodatabases, and ArcGIS Data Store
- Performance optimization and analysis of spatial databases in multi-user and distributed GIS environments
- Enterprise geodatabase architecture, maintenance, and scalability planning across ESRI and relational database platforms.

TECHNICAL SKILLS

- **GIS & Database Skills:** Geodatabase Management, Web Map Creation and Maintenance, Enterprise GIS Operations, ArcGIS Server Management
- **Security & Access Control:** Roles and Authorizations, User Access Management
- **GIS Data Expertise:** As-Built Drawings, Schematics, Dimensioning, Aerial Imagery, Parcel Maps, Cadastral Maps, Legal Property Descriptions, Legacy GIS Records
- **GIS Tools & Formats:** Multiple GIS File Formats, GIS and Graphics Programs, Current GIS Versions and Tools
- **Domain Knowledge:** Environmental GIS, Land Records, Infrastructure and Utilities Mapping
- **Collaboration & Consulting:** Consulting and Planning Expertise, Cross-Department and Program Collaboration
- **Professional Skills:** Customer Service, Organizational Skills, Attention to Detail, Written and Verbal Communication, Technical Presentations

PROFESSIONAL EXPERIENCE

GIS Data Services Specialist, Tyler Technologies, Latham, NY | 11/2023 to Present (current position)

- Perform highly specific, detail-orientated tasks related to addresses and road connectivity maintenance for school district student busing routes using GIS tools to create and/or update current GIS databases that has a significant impact on the company’s reputation and ability to secure recurring revenue.
- Architected and maintained high-availability GIS database environments across development, staging, and production systems with optimized data workflows.
- Integrated GIS platforms with enterprise IT systems via REST services, enabling seamless data exchange with asset management and operational systems.
- Designed and implemented disaster recovery strategies for enterprise GIS systems, including database replication, failover configurations, and backup validation procedures to ensure business continuity.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.

Contract GIS Technician, Capital Staffing Solutions (NextEra), Juno Beach, FL | 11/2023 to 5/2024 (6-month contract)

- Responsible for maintaining and appending data from KMLs to server databases for construction management of solar and wind projects.
- Created GIS webmaps and Web Apps.
- Optimized spatial SQL queries using indexing strategies, execution plan analysis, and query refactoring, improving GIS application performance by X%.

- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Creating and automating metadata content for geospatial datasets/web services and automation/scripting skills to load/update metadata.
- Creating, automating, and optimizing ESRI WFS/WMS/Vector Tile Services.
- Assisted in as-builts, templates, schemas and data migration.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Contract GIS Technician, 22nd Staffing (State of Washington, Tacoma), Tacoma, WA | 1/2023 to 1/2024 (1-year contract)

- Responsible for digitizing legal descriptions via COGO and georeferencing scanned .jpeg/.tiff images for statewide webmap.
- Assisted in developing action plan for implementation of all resources into the statewide mapping system.
- Creating, automating, and optimizing ESRI WFS/WMS/Vector Tile Services.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Creating and automating metadata content for geospatial datasets/web services.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Contract GIS Editor, Capital Staffing Solutions (BNSF Railways), Fort Worth, TX | 1/2023 to 7/2023 (6-month contract)

- Responsible for digitizing Intermodal parking spots from drone aerial photography by using editing and advanced editing tools with spatial and network analyst.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Developed automation scripts (Python/SQL) for database maintenance, monitoring, and deployment, reducing manual intervention and improving system reliability.
- Updated attribute data with VB and Python scripting and QA/QC for accuracy of digitization and photo detail.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Contract GIS Technician, Transcon Environmental, Draper, UT | 5/2022 to 5/2023 (1-year contract)

- Responsible for providing support for large energy infrastructure projects by updating and maintaining ArcGIS online maps, developing and publishing web browser maps and Survey123 forms.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Designing, implementing, tuning, and analyzing geospatial databases with SQL Server, dBase, distributed databases, enterprise geodatabases, ESRI file geodatabases, ArcGIS Data Store, and some PostgreSQL.
- Familiarity with Experience Builder, Web App Builder Developer Edition, Arcade programming language, ArcGIS online, Dashboards, Field Maps, Survey 123 Connect, construction projects.
- Creating, automating, and optimizing ESRI WFS/WMS/Vector Tile Services.
- Responsible for providing support for large energy infrastructure projects by updating and maintaining ArcGIS online maps, developing and publishing web browser maps and Survey123 forms.
- Creating and automating metadata content for geospatial datasets/web services and automation/scripting skills to load/update metadata.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.
- Microsoft SQL Server for database design, implementation, and maintenance utilizing geospatial data and associated non-geospatial data.

GIS Technician, Box Elder County Recorder, Brigham City, UT | 11/2021 to 4/2022 (6-month contract)

- Admin of ArcServer and ArcSDE for installing, managing, maintaining and configuring all aspects of GIS Office for Box Elder County for the GIS system to build, create, edit, modify and maintain GIS applications, webmaps archiving, field

collection survey forms, authorization of user logins, backups, archives, SDE loading, patches, troubleshooting and data sharing.

- Supporting GIS end users, including ArcGIS Desktop, ArcGIS for Server, ArcGIS Data Store, and/or custom business applications, and troubleshooting application and/or database issues.
- Designing, implementing, tuning, and analyzing geospatial databases with SQL Server, distributed databases, enterprise geodatabases, ESRI file geodatabases, and ArcGIS Data Store.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Diminished all backlogs including 14000+ addresses, 100+ surveys and creating 30+ web maps and applications.
- Microsoft SQL Server for database design, implementation, and maintenance utilizing geospatial data and associated non-geospatial data.

GIS Data Technician I, Los Angeles County, Norwalk, CA | 12/2019 to 10/2021 (moved)

- Maintaining, creating, and supporting county and departmental GIS databases, volunteering for special voting projects.
- Serving as a technical resource to subordinate technicians to provide work guidance and direction by performing QA/QC reviews.
- Creating a county wide database, dashboard for public use and streamlined customer maps request process.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Contract GIS Technician IV, SWCA, Pasadena, CA | 6/2019 to 6/2020 (1-year contract/covid)

- Technical and analytical lead within the GIS group, managing data and developing Web Maps/Apps.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Built tools and scripts to help in the automation of deliverables and creating documentation for production maps.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Designing, implementing, tuning, and analyzing geospatial databases with dBase, distributed databases, enterprise geodatabases, ESRI file geodatabases, ArcGIS Data Store, and some SQL.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.
- Creating and automating metadata content for geospatial datasets/web services and automation/scripting skills to load/update metadata.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Lead GIS/CAD Analyst, KMEA San Diego, CA | 8/2018 to 1/2020 (reduction in workforce/covid)

- Managing, supervising, maintaining, developing and preparing all types of GIS spatial data, design drawings, layouts, basic plans, and creation of design and as-built drawings using AutoCAD.
- Supporting GIS end users, including ArcGIS Desktop, ArcGIS for Server, ArcGIS Data Store, and/or custom business applications, and troubleshooting application and/or database issues.
- Designing, implementing, tuning, and analyzing geospatial databases with distributed databases, enterprise geodatabases, ESRI file geodatabases, and ArcGIS Data Store.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcPro, ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, ArcGIS Server, AGOL, Enterprise Portal, Esri Interoperability, Spatial Adjustment, COGO, and GeoRef.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Point of contact for end-user support and training removing the need of 3rd party vendors

Contract GIS Project Specialist, Southern California Gas Company (Darnell Technical) Los Angeles, CA | 10/2017 to 5/2018 (6+-month contract)

- Responsible of populating database tables and attributes by verifying the accuracy and completeness of data by reviewing, reading, researching and interpreting data sources, creating standard scripts, macros and queries as part of QA/QC.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcMap, ArcCatalog, ArcToolbox, Spatial Adjustment, and GeoRef.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.

Senior GIS Associate, Ramboll Environ Irvine, CA | 6/2016 to 4/2017 (reduction in work force)

- Lead of GIS and graphics department for the southwest business unit and point of contact for all geospatial inquiries, graphics, geospatial support and projects.
- Designing, implementing, tuning, and analyzing geospatial databases with distributed databases, ESRI file geodatabases, and ArcGIS Data Store.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, Esri Interoperability, Spatial Adjustment, and GeoRef.
- Managing 1st and 2nd Tier technical support requests, resolution and troubleshooting by providing technical demonstrations and knowledge transfer/dissemination to employees and clients to advise and assist in resolving complex problems with mentoring, supervising and managing junior analysts and to provide and coordinate training to staff as requested. Installing and configuring ArcGIS in SDE environment.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Supporting GIS end users, including ArcGIS Desktop, ArcGIS for Server, ArcGIS Data Store, and/or custom business applications, and troubleshooting application and/or database issues.
- Assisting in business development initiatives the Data Science and Integration Advisory Board, working with landowners and land acquisition from government entities to ensure ownership in the remediation process.

Contract Natural Resource Specialist GIS, AMEC Foster Wheeler (Contract MCAGCC) 29 Palms, CA | 2/2016 to 6/2016 (3+-month contract)

- Researching, updating/managing/installing/configuring ArcGIS SDE database for desert tortoise and other natural resources, incorporating, updating, analyzing datasets for accuracy to provide maps and figures.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, AGOL, Spatial Adjustment, and GeoRef.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Drafting, managing and reviewing of annual regulatory reports for MCAGCC's Land Acquisition Biological Opinion, Integrated Natural Resources Management Plan, and USFWS Tortoise and MBTA Permits.

Contract Lead GIS Specialist/Consultant, Parsons Government Services El Segundo, CA | 9/2014 to 4/2015 (6-month contract)

- Responsible for the management and supervision of installing and configuring the Installation Geographic Information System (IGIS) in ArcSDE providing maps, geospatial analysis on various types of formats, and performing quality assurance/control.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, Spatial Adjustment, COGO, and GeoRef.
- Supporting GIS end users, including ArcGIS Desktop, ArcGIS for Server, ArcGIS Data Store, and/or custom business applications, and troubleshooting application and/or database issues.
- Designing, implementing, tuning, and analyzing geospatial databases with distributed databases, ESRI file geodatabases, and ArcGIS Data Store.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Creating, managing and updating GIS data layers, databases with raster/vector data, collecting field data (GPS), LRS, GLONASS, LiDAR, modeling and Google Earth KMZ output, digitizing and rectifying satellite aerial photography, performing remote sensing analysis, differential corrections, and testing and RFP/RFI contract data entry.

Contract GIS Mapping Technician, PG&E (Contract Insight Global) San Ramon, CA | 4/2014 to 9/2014 (6-month contract)

- Assisting with SAP data entry, GIS map updates, edits, QA/QC, GIS extensions testing and troubleshooting within PODs platform.
- Experience with using and manipulating both geospatial vector and raster data in a geospatial database with the suite of ESRI software, including: ArcMap, ArcCatalog, ArcToolbox, Spatial Analyst, Network Analyst, Esri Interoperability, Spatial Adjustment, COGO, ArcFM, and GeoRef.
- Performing/automating quality assurance and quality control (QA/QC) procedures/checks on geospatial data.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Familiar with ArcMap FM environments, GasMap, high pressure gas lines, Transmission and Distribution, PSRS, PFLs, PSEP, Researching, creating and managing Job Packages, Cut-Offs, Deactivation, Leaks, Surveys, Inspections, and Installations.
- Reduced 80% backlog of 300+ projects within 5 months.

Resource Specialist Lead GIS/District Manager, USDA Forest Service GS/0401/09-03 San Bernardino National Forest, CA | 11/2008 to 8/2012 (reorganization)

- Lead GIS Specialist for the Mountaintop Ranger District (MTRD) Responsible for developing maps for all departments.
- Supporting GIS end users, including ArcGIS Desktop, ArcGIS for Server, ArcGIS Data Store, and/or custom business applications, and troubleshooting application and/or database issues.
- Designing, implementing, tuning, and analyzing geospatial databases with distributed databases, ESRI file geodatabases, and ArcGIS Data Store.
- Managing authorization of user logins, backups, archives, SDE loading and tuning, patches, troubleshooting, data sharing, and installing ArcSDE.
- Supporting large-scale GIS projects performing needs assessment, data creation/migration, data maintenance, and dissemination.
- Designing, implementing, and managing geodatabases at an enterprise/multi-user level on Microsoft SQL Server and ESRI ArcGIS Server.
- Special Uses Database (SUDS) program Manager for recreational cabins assessments and leases and District Manager for Planning, Appeals, and
- Litigation System Program for public scoping managing projects and groups, supervising the NEPA process in support of contamination and restoration monitoring studies.

13. GIS Architect

Naresh Aligeti, GIS Architect

SUMMARY: GIS Architect with over 16 years of progressive experience designing, implementing, and managing enterprise-scale GIS systems, with deep expertise in ArcGIS Enterprise, ArcGIS Online, and enterprise geodatabases supporting large utility and transportation organizations. Currently serves as a GIS Architect for the North Carolina Department of Transportation (NCDOT), leading enterprise GIS architecture initiatives and cloud modernization efforts. Possesses proven expertise in architecting scalable, high-availability GIS environments, including cloud-native and hybrid deployments across AWS and Microsoft Azure, utilizing Kubernetes, serverless architectures, and automated infrastructure provisioning. Brings a strong background in enterprise system integration, enabling seamless geospatial data exchange with platforms such as SAP, Maximo, and ServiceNow. Demonstrates leadership in establishing GIS standards, governance frameworks, and best practices, while mentoring cross-functional teams of GIS developers, analysts, and database administrators. Highly experienced in performance optimization of enterprise GIS platforms, including spatial database tuning, automated geoprocessing workflows, and monitoring frameworks. Proven in disaster recovery and high-availability planning, cloud migrations, and development of enterprise architecture roadmaps aligned with long-term digital transformation strategies, while collaborating closely with business stakeholders, IT leadership, and engineering teams

EDUCATION & CERTIFICATIONS

- Graduate Teaching Assistant (GIS/Env Lab), University of Missouri-Kansas City
- Bachelor of Engineering in Electronics and Communications from Anna University, 2006
- Master of Science in Environmental geography & GIS from University of Missouri - Kansas City, 2011
- Esri certified Enterprise Geodata Management Professional, C5T8DFS2DMFQ12KF
- Esri certified Enterprise Geodata Administration Professional, 4LKEXSE1B1F4QCWV
- Advanced GIS Certificate from University of Missouri Kansas City
- 2017 Engineering Innovation Award recipient from Southern Gas Association.
- IEEE Co-author of a NASA article, Mapping Aquatic Vegetation on Lake Victoria
- Certificate of appreciation from NASA after working as an Intern.

CORE COMPETENCIES

- GIS & Geospatial Technologies: GIS Architecture, Enterprise Geospatial Systems, Spatial Analysis, Visualization, Digital Twin Solutions
- Asset & Integrity Management: Asset Management, EAM, DIMP, TIMP, Integrity Management, C55, Copperleaf
- Architecture & Strategy: Enterprise Architecture (EA), Solution Architecture, GIS Architecture, Technology Strategy, Roadmaps, UML, Bizdesign, Sparx
- Integration & Systems Design: System Integrations, Event-Driven Architecture, API-Based Architectures, Enterprise Platforms Integration
- Cloud & Modern Platforms: Cloud Computing, AWS, Microsoft Azure, Serverless Architectures
- Data, AI & Automation: Python, AI, Machine Learning, Advanced Analytics
- Application Development: .NET, C#, Spatial Application Development
- Enterprise Platforms: SAP, SAP HANA
- Delivery & Leadership: Agile, Scrum, Technical Leadership, Stakeholder Engagement, Cross-Functional Team Leadership

TECHNICAL SKILLS

- **GIS & Geospatial Technologies:** ArcGIS Enterprise, ArcGIS Online, ArcGIS Server, ArcGIS Desktop, ArcGIS Pro, ESRI Geodatabase, Geocortex, Linear Referencing System (LRS), Spatial Analysis, Enterprise GIS, Geospatial Data Management
- **Enterprise Architecture:** Enterprise Architecture (EA), Bizdesign, Sparx Systems, UML Modeling, Solution Architecture, Technology Roadmaps, Architecture Governance, Digital Transformation
- **Asset Management Platforms:** Copperleaf C55, Enterprise Asset Management (EAM), Asset Performance Management, Utility Asset Lifecycle Management, Integrity Management (DIMP, TIMP)
- **Cloud Platforms:** AWS (Lambda, S3, CloudFormation), Microsoft Azure, Azure DevOps, Kubernetes, Multi-Cloud Architecture, Cloud Migration, Serverless Architecture
- **Programming & Scripting:** Python, PowerShell, Batch Scripting, .NET, C#
- **Databases:** ArcSDE, PostgreSQL, Spatial Databases, Enterprise Geodatabases, Data Modeling, Database Performance Tuning
- **Enterprise Integrations:** REST APIs, Service-Oriented Architecture (SOA), Event-Driven Architecture, GIS-SAP Integration, GIS-Maximo Integration, GIS-ServiceNow Integration
- **Security & Networking:** Active Directory, Authentication & Authorization, HTTPS, SSL/TLS, LDAP, IPSEC, Network Security, Firewall Rules
- **DevOps & Automation:** Azure DevOps Pipelines, CI/CD Pipelines, Deployment Automation, Infrastructure Automation, Configuration Management

PROFESSIONAL EXPERIENCE

North Carolina Department of Transportation | July 2024 – Present

GIS Architect – State GIS Unit

- Architect and support Enterprise GIS platforms using ArcGIS Enterprise, ArcGIS Online, and ESRI geospatial technologies, enabling scalable geospatial solutions for statewide transportation infrastructure management.
- Designed and implemented integration frameworks between GIS and SAP systems to enable seamless exchange of asset and spatial data across enterprise applications.
- Led the migration strategy and deployment of on-premise Enterprise GIS infrastructure to Microsoft Azure, improving system scalability, availability, and disaster recovery capabilities.
- Implemented and optimized ArcGIS Enterprise deployments on Kubernetes, ensuring high availability, performance optimization, and containerized GIS infrastructure management.
- Developed enterprise architecture models and UML diagrams using industry-standard architecture practices to document GIS platform design and technology roadmaps.
- Collaborated with cross-functional teams to design and develop GIS application components including Linear Referencing Systems (LRS), Roads and Highways modules, and custom geospatial applications.
- Provided architectural guidance for enterprise geospatial applications including Spot Online, NC CRIS, and ATLAS, supporting statewide transportation data analysis and visualization.
- Designed and implemented REST API and service-oriented architecture (SOA) integrations to enable secure data exchange between GIS platforms and enterprise systems.
- Established quality assurance and governance frameworks for Enterprise GIS, implementing standards, best practices, and auditing processes to ensure data accuracy and system reliability.
- Automated deployment, configuration management, and infrastructure provisioning using PowerShell scripting and Azure DevOps pipelines to streamline GIS application delivery.
- Designed secure GIS architecture environments implementing authentication, authorization, SSL/TLS certificates, Active Directory integration, and secure communication protocols.

- Worked closely with GIS architecture teams to assess and improve existing system architectures, identifying opportunities for modernization and performance improvements.
- Managed complex enterprise architecture initiatives, balancing multiple priorities while delivering scalable geospatial solutions aligned with business and technology goals.
- Implemented n-tier architecture and web technology frameworks to support scalable GIS services, enterprise integrations, and high-performance geospatial data processing.
- Led enterprise GIS governance initiatives including architecture documentation, system audits, and compliance with security and operational standards, ensuring reliable and future-ready geospatial infrastructure.

Ameren | June 2021 – June 2024

Lead Enterprise Architect – Asset Management

- Led the enterprise architecture strategy for GIS and asset management platforms, aligning geospatial technologies with Ameren’s digital transformation initiatives across electric and gas utility operations.
- Architected large-scale GIS solutions using ESRI technologies, enabling enterprise-wide spatial analytics, mapping services, and advanced geospatial data visualization capabilities.
- Spearheaded multiple Copperleaf C55 implementation initiatives, integrating asset investment planning with enterprise GIS and EAM platforms to improve capital planning and asset performance management.
- Designed distributed collaboration architecture between on-premises GIS systems and AWS cloud environments, enabling real-time geospatial data synchronization and cross-platform collaboration.
- Developed automated infrastructure deployment templates using AWS CloudFormation, enabling scalable provisioning and governance of cloud-based GIS environments.
- Implemented enterprise data pipelines enabling AWS Databricks to consume geospatial and operational data from on-premise systems, supporting advanced analytics and predictive modeling initiatives.
- Designed and deployed automated enterprise GIS backup and disaster recovery solutions using AWS S3, ensuring data resilience and long-term archival strategies.
- Led the migration of enterprise GIS infrastructure and geospatial data platforms to AWS cloud, enabling improved scalability, system performance, and cost optimization.
- Collaborated with cloud architecture, cybersecurity, and enterprise governance teams to establish secure patterns, architectural standards, and best practices for geospatial cloud adoption.
- Developed enterprise GIS architecture blueprints and technology roadmaps, guiding the adoption of emerging geospatial technologies and modern cloud-based spatial platforms.
- Provided technical leadership and architecture governance across multiple large-scale GIS initiatives, ensuring compliance with enterprise standards and architectural best practices.
- Worked closely with product managers, engineers, and GIS analysts to design and deliver new ArcGIS Enterprise capabilities supporting next-generation geospatial services.
- Established integration frameworks between enterprise asset management systems and geospatial platforms, enabling unified asset lifecycle visibility and improved operational decision-making.
- Mentored and guided geospatial engineers and GIS analysts, providing architectural oversight, technical coaching, and best practices for enterprise geospatial development.
- Developed long-term enterprise GIS modernization strategies, reducing on-premise data footprint and enabling scalable cloud-native geospatial infrastructure for future innovation.

Burns & McDonnell Inc. | June 2019 – May 2021

Senior Solution Architect

- Provided enterprise-level geospatial architecture consulting to support large-scale infrastructure and engineering projects, ensuring high availability and reliability of spatial data services for internal and external stakeholders.
- Designed and implemented enterprise spatial data standards, governance models, and data lifecycle management frameworks, ensuring consistency, integrity, and scalability of geospatial data assets.
- Led the architecture and implementation of ArcGIS Online enterprise environments, enabling secure collaboration, geospatial data sharing, and scalable mapping services across multiple business units.
- Developed automated backup and disaster recovery solutions for ArcGIS Online environments using Azure cloud services, ensuring protection and high availability of large geospatial datasets.
- Architected serverless geospatial processing workflows using AWS Lambda and Azure Functions, enabling efficient automation of spatial data processing and integration pipelines.
- Implemented enterprise charge-back and cost allocation models for ArcGIS Online usage, enabling accurate billing, usage monitoring, and cost optimization across departments.
- Designed and implemented system integration solutions to automate geospatial data exchange between internal enterprise applications and external data sources, improving operational efficiency and data accessibility.

- Migrated on-premise GIS infrastructure and geospatial services to multi-cloud environments (AWS and Azure), enabling flexible deployment strategies and enhanced system scalability.
- Developed knowledge base documentation and operational support frameworks, improving issue resolution, incident management, and support efficiency for geospatial platforms.
- Performed root cause analysis of recurring system issues, implementing proactive monitoring and performance optimization strategies for enterprise geospatial services.
- Evaluated and implemented new geospatial technologies and enterprise IT tools to enhance spatial analytics capabilities and support evolving business requirements.
- Collaborated with business leaders, technical analysts, and vendor partners to design and implement enterprise geospatial solutions aligned with organizational objectives.
- Led application testing, deployment, and product beta evaluations, providing technical feedback to improve geospatial platforms and enterprise GIS capabilities.
- Delivered technical training, peer-to-peer workshops, and enterprise knowledge sharing sessions, improving adoption and effective utilization of GIS technologies across engineering and infrastructure teams.

American Water Inc. | October 2018 – June 2019

Senior Technologist

- Served as the technical lead for GIS–SAP integration initiatives, enabling seamless synchronization of geospatial asset data with enterprise asset management systems to support operational and infrastructure planning.
- Designed and implemented automation frameworks to monitor and maintain the health of 19 enterprise SDE geodatabases, improving system stability, performance, and enterprise GIS data availability.
- Engineered data migration pipelines to move spatial data from ArcSDE environments to PostgreSQL-based open-source spatial databases, enhancing data accessibility and reducing operational costs.
- Developed and implemented a spatial data quality validation system, automatically identifying and preventing data integrity issues before geospatial information entered enterprise production environments.
- Optimized enterprise geospatial database performance through automated monitoring, tuning, and data management best practices, ensuring reliable GIS operations across utility infrastructure systems.
- Collaborated with cross-functional IT and GIS teams to enhance enterprise geospatial workflows, supporting scalable data management, spatial analytics, and improved decision-making for water utility asset operations.

ONEOK Inc / ONE Gas Inc. | June 2014 – October 2018

Developer Analyst II

- Served as the primary technical lead for enterprise geodatabase architecture, managing and optimizing ArcGIS geodatabases supporting large-scale natural gas pipeline and infrastructure operations.
- Led the implementation and configuration of Geocortex-based enterprise GIS applications, delivering advanced web mapping solutions and improving access to spatial data across business units.
- Provided technical leadership for Pipeline Integrity Management initiatives, supporting Distribution Integrity Management Program (DIMP) and Transmission Integrity Management Program (TIMP) compliance through advanced geospatial data analysis.
- Participated in the predictive analytics program leveraging Copperleaf C55, supporting data-driven asset investment planning and risk-based infrastructure decision-making.
- Designed and implemented conceptual and physical spatial data models to support enterprise GIS applications, improving data organization, scalability, and performance.
- Developed custom data integration and transformation routines to export, import, and synchronize complex geospatial datasets between enterprise applications and operational systems.
- Engineered database tuning and spatial performance optimization strategies, improving query performance, data access speeds, and reliability of enterprise geospatial services.
- Automated GIS data maintenance and administrative tasks using custom scripting solutions, reducing manual effort and improving operational efficiency.
- Implemented enterprise version management and change control processes for geospatial databases, ensuring data integrity, auditability, and controlled updates across distributed GIS teams.
- Provided technical consulting to business stakeholders, translating operational requirements into scalable GIS solutions aligned with enterprise technology standards.
- Supported installation, configuration, and troubleshooting of enterprise GIS software platforms, ensuring reliable deployment and stable operation of geospatial applications.
- Conducted industry research and technology evaluations to identify emerging GIS tools and technologies that could enhance enterprise geospatial capabilities.
- Developed quality control and spatial data governance processes, ensuring compliance with organizational standards and improving geospatial data accuracy.

- Collaborated with cross-functional IT, infrastructure, and vendor teams to deliver enterprise GIS initiatives within defined timelines and operational requirements.
- Delivered technical documentation, training materials, and user guidance, enabling business users and analysts to effectively utilize enterprise GIS platforms.
- Supported SDLC-based development and deployment of GIS applications, including requirements gathering, design, testing, implementation, and ongoing system enhancements.

Additional Experience:

Global Information Systems, Kearney, MO | Oct 2012 to June 2014

**Energy Transfer Pipeline Company, NiSource Gas Transmission, Colonial Pipeline
GIS Business Analyst II,**

Chesapeake Bay Helicopters, Hampton Roads, VA | January 2012- October 2012

LiDAR/GIS Analyst

14. GIS Application Developer (ArcGIS API for JavaScript)

Mariano Manzano III, GIS Application Developer (ArcGIS API for JavaScript)

SUMMARY: Mariano Manzano III is a highly skilled GIS Application Developer with over 10 years of hands-on experience designing, developing, and maintaining enterprise GIS solutions using the Esri ArcGIS platform, including ArcGIS Enterprise, ArcGIS Online, and ArcGIS Pro. He has strong expertise in building web-based GIS applications using ArcGIS API for JavaScript, Experience Builder, and modern frameworks such as React, along with Python for geoprocessing and automation. Mariano has extensive experience integrating GIS applications with enterprise databases including SQL Server, Oracle, and ArcSDE geodatabases, ensuring efficient spatial data management and optimized performance. He has supported GIS analysts and development teams by troubleshooting geoprocessing workflows, debugging applications, and enhancing system functionality. His background includes optimizing GIS services, publishing map services, and implementing scalable solutions within Agile environments using modern development tools and best practices, making him a strong match for GIS Application Developer roles.

EDUCATION

- Sam Houston State University | Aug 2021 – May 2026
Master of Science - MS, Geographic Information Systems
- South Texas College logo
Bachelor's degree, Computer/Information Technology Administration and Management | 2019

TECHNICAL SKILLS

- **GIS Platforms:** ArcGIS Pro, ArcMap, ArcGIS Online, ArcGIS Enterprise, ArcGIS Experience Builder, ArcGIS Web AppBuilder
- **Programming:** Python, JavaScript, HTML, CSS, React
- **Web & Cloud:** Azure Maps, AWS (S3), Portal for ArcGIS
- **Data & Databases:** SQL Server, Oracle, MS Access, ArcSDE Geodatabases
- **Automation & Tools:** Jupyter, Power BI, Visual Studio Code, Python scripting
- **Geospatial Tools:** Spatial Analyst, 3D Analyst, Model Builder, Survey123, Workforce

PROFESSIONAL EXPERIENCE

Southwest Power Pool - Plano, Texas (remote) | March 2025 – Current

GIS Developer

- ArcGIS Enterprise deployment including Portal for ArcGIS
- Created GIS Web applications with ArcGIS Experience Builder Developer Edition and ArcGIS Online
- Geoprocessing and data management with ArcPro 3.3
- Publish Transmission Atlas maps series and map packages with ArcPro 3.3
- Maintain Transmission Atlas layout and its layers
- Maintain geodatabase feature classes for transmission maps covering the SPP footprint

Marks Analysts and Consultants LLC - Edinburg, Texas | January 2016 – March 2025

GIS Analyst/Developer/Owner

- Worked with the customer to create business cases, identify problems, and solutions
- Reviewed development environment, identified discrepancies and recommended licensing solutions to the customer
- Conducted testing alongside the customer before go live deployment
- Created GIS Web applications and custom widgets using ArcGIS Experience Builder Developer Edition with Amazon Web Services S3 (Simple Storage Service) to host.
- With Microsoft Visual Studio Code, I utilized ArcGIS API for Javascript

- Developed Hidalgo County property owner mapping application for Linebarger Goggan Blair & Sampson, LLP for purposes of delinquent tax collection on behalf of Hidalgo County, Tx and other taxing entities with Calcite Design System, CSS, React, and html
- Developed mapping application for Lone Star National Bank that included Calcite components such as the following, Slider, Select, Panel, and Button.
- Azure map account creation for geospatial services
- With Azure maps, I developed mapping applications and map controls, options, styles, and data source configurations
- Spatial Analyst and map production with ESRI Desktop applications such as ArcPro, and ArcMap
- Python, Jupyter, Folium, Geopandas, Leaflet, ipyleaflet.
- Conducted demos for prospective clients

USDA Contractor - Plano, Texas (remote) | May 2024 – August 2024

GIS Programmer

- Reviewed development environment, identified discrepancies and recommended licensing solutions to the customer
- Conducted testing alongside customer technical staff
- All development and maintenance conducted in ArcGIS Enterprise environment
- Deployment of Portal for ArcGIS and services for ArcGIS Enterprise
- Widget development with ArcGIS Experience Builder Developer Edition, ArcGIS Maps SDK for JavaScript

Leidos (CDC Contractor) - Plano, Texas (remote) | September 2022 – March 2024

GIS Developer

- Worked in an Agile environment and tracked individual and team tasks and deliverables.
- Conducted and engaged in weekly sprint, and backlog refinement meetings
- Worked with the customer to create a business case, identify problems and solutions
- Reviewed development environment, identified discrepancies and solutions
- Measle vaccination mapping for the U.S. in support of CDC Director Dr. Mandy Cohen.
- Managed and maintained ArcGIS Hub Content enhancements for organization and public consumption
- Developed web-based geospatial applications with the ESRI stack (ArcGIS Business Analyst, ArcGIS Notebooks (Python), Jupyter, ArcGIS Experience Builder, and ArcGIS Web AppBuilder).
- Used ArcGIS Web AppBuilder to apply feature layer updates to the Vaccine Activity Planner application that contained forty-five layers.
- Geoprocessing and data management with ESRI ArcGIS Desktop applications such as ArcPro
- Management and administration of ArcGIS Online Organization content, groups, and users. Use of Microsoft Power BI for dashboard development in Azure DevOps

American Electric Power - Plano, Texas (remote) | December 2021 – July 2022

Senior GIS Specialist

- Provided geospatial and developer support for the Atlas GIS Web application with ArcGIS Web Appbuilder via portal for ArcGIS
- Geoprocessing and data management with Arcpro 2.7
- MMPK creation; publish map services with ESRI ArcGIS Desktop's ArcPro
- Provision users for ArcGIS portal and grant entitlements for customer support
- Provided user support for field crews addressing access and system issues

S & B Infrastructure Ltd.- McAllen, Texas | May 2019 – November 2021

GIS Analyst

- Developed and maintained all GIS data and ArcGIS Online applications company wide
- Created maps for roadway, drainage and environmental projects utilizing EMST, NDD, streets, Lidar and DEM data
- Utilize SQL to design and develop Oracle and MS Access relational databases for roadway, drainage, and environmental projects
- Worked on various projects for customers around Texas including but not limited to Montgomery, Harris, Maverick, Hidalgo, Cameron, and Tarrant Counties

County Commissioner Precinct 4 - Hidalgo County Drainage District, Edinburg, Texas | February 2017 – May 2019

GIS Operator

- Utilized ArcGIS Survey 123 to create applications for ditch and construction inspections as well as ditch maintenance. Utilized ArcGIS Workforce for task assignment and accountability. Python scripting for data automation.

- Developed services such as map, geocode, image, and geodata services via ArcGIS Server, and configured search tools such as parcel, address, street, and project search tools. Supported projects that would include both road, bridge, and drainage projects
- Developed and maintained ArcSDE Geodatabases with SQL Server also trained and
- mentored Precinct staff on the use of Precinct's Web application and its tools

TEDSI Infrastructure Group - Mission, Texas | October 2013 – September 2016

GIS Manger/Consultant

- Worked on drainage, road and major thoroughfare projects for customers including but not limited to the counties of Hidalgo, Cameron and several local municipalities
- Delta Canal Ditch Project in Precinct 1 in accordance with Hidalgo County Drainage District #1 (HCDD#1) where I provided watershed analysis using LIDAR data and DEM overlays, Ownership and Location mapping
- Delta Region Water Management Project in Hidalgo County Precinct 1 in accordance with HCDD#1, Rio Grande Regional Water Authority and Texas Commission on Environmental Quality where I provided watershed analysis using LIDAR and DEM data, contours, and hill shading overlays.
- ArcView, ArcMap, ArcInfo, ArcGIS Server, ArcGIS Online, Spatial Analysis, 3D Analyst
- Created custom GIS Web Applications, provided training on GIS applications and software. SDE Geodatabase, file and personal Geodatabase design

Hidalgo County IT Department - Edinburg, Texas | August 2008 – October 2013

GIS Manager/GIS Operator for Hidalgo County

- ArcView, ArcMap, ArcInfo, ArcGIS Server, Spatial Analysis, Model Builder
- Created custom GIS Web Applications and conducted training. Provided maps and geospatial analysis to county departments. Python scripting for data automation.
- Coordinated and guided vendor and Sherriff's Department GIS staff with integration of their Public Safety Software (Spillman Technologies) and GIS that would include CAD system's Echo districts in the form of polygons, polylines and points for addressing.
- Managed GIS data and services for use with Spillman Flex Software Suite at Sherriff's Department.
- Worked alongside staff at Emergency Management and Council of Government's 911 CAD system that would include fire districts and emergency response systems, in the form of address points, polygons, and polylines.
- Coordinated and managed the Census's Count Question Resolution, and Local Update of Census Address Programs. Held three Inter local Agreements with three cities where custom web applications were created for their constituents and employees
- Manage and maintained 3 Dell Power edge Servers running ArcGIS Server Advanced Enterprise and SQL Server

Hidalgo County Elections Department - Edinburg, Texas | February 2004 – August 2008

Information Technology Specialist/GIS Operator

- Identified street indexing issues and database conversion errors by vendor, assigned staff and supervised corrections process with GIS and SQL
- Created custom GIS web applications, supervised and managed Voter Registration and GIS staff
- Sustained all GIS, computer, database and network systems, programmed, maintained all voting systems, software, and provided training.
- Implemented and Managed Dell Power Edge 2350 Server running Windows Server 2003ru, and Microsoft SQL Server and ArcGIS Server
- Established and maintained GIS Policy where a "sub precinct" layer was created for more accuracy and efficiency of Jurisdictional assignments
- Sustain all computer and network systems

15. Senior GIS Application Developer

Phillip J.H. Ulbrich, Senior GIS Application Developer

SUMMARY: Phillip J.H. Ulbrich is a highly qualified Senior GIS Application Developer with over 20 years of experience designing, developing, and maintaining enterprise GIS solutions using Esri technologies, including ArcGIS Enterprise, ArcGIS Online, ArcGIS Pro, Portal, and ArcSDE. He brings strong expertise in building and supporting web-based GIS applications, dashboards, and geospatial platforms, along with hands-on experience integrating GIS systems with enterprise databases and performing advanced spatial analysis, ETL, and data optimization. His background includes leading GIS initiatives for federal, state, and city agencies such as FEMA, NYC OEM, and MTA, where he supported large-scale, mission-critical systems. He has extensive experience in Python scripting, geoprocessing, and automation, as well as troubleshooting and optimizing GIS application performance for scalability and efficiency. Additionally, he is well-versed

in Agile practices, version control tools, and cross-functional collaboration, with proven ability to guide GIS analysts and stakeholders while delivering high-quality geospatial solutions.

EDUCATION & CERTIFICATIONS

- Master of Arts, Gastronomy 3.5 GPA - University of Gastronomic Sciences | 2009
Parma, IT Thesis: A Geographic Approach to Slow Food
- Intern - United Nations World Food Program Rome, Italy | August 2009
- Bachelor of Arts, Geography 3.5 GPA - Georgia State University 2004
- ArcGIS Desktop Professional Course 10.1; Certification from ESRI in Arc 9.0 (Advanced Level)

TECHNICAL SKILLS

- JIRA – Issue tracking software for RFI's, service desk management, and project management.
- Gallery Submission Surge Inundation Map - Museum of the City of New York, Hurricane Sandy Exhibit | April 2014
- Python – NGA led training on Python fundamentals within ArcGIS Desktop
- Active participant with GeoNYC Meetup; Geodata visualization discussions & presentations with Google, Facebook, NY Times, NY Public Library, Four Square, et al.
- ArcSDE versioning process and licensed extensions (spatial analyst, geo-statistical applications)
- NOAA Coastal Inundation Mapping: sea level rise, projections, & transformation | May 2013, April 2018
- Residential Coastal Construction & Engineering guidance FEMA & URS Corp grant.
- Teaching Strategies for AP Geography: Georgia Geographic Alliance (GSU) | Summer 2003
- Cadasta Foundation – imagery analysis on settlement encroachment for ICC case in Liberia, Africa | March 2021

PROFESSIONAL EXPERIENCE

Shoals Marine Lab – Cornell University & University of New Hampshire | May 2025 – Aug 2025

GIS Logistics Coordinator (seasonal)

- Comprehensive data support for remote marine science field station.

New York City Metropolitan Transportation Authority (MTA) - Subways Division | Sep 2023 – Sep 2024

GIS Consultant - Kumar Consulting LLC. / Unique Comp Inc.

- Dashboard configuration/ webmap application development for Engineering & Capital Planning Departments.
- Field of View-shed analysis (CCTV streaming) for Electronic Maintenance Division and Security Teams.
- Linear Referencing System(Roads & Highways) for Enterprise Asset Management and data visualization.
- Georeferencing station platform plans, FME data extraction, water intrusion analysis on infrastructure impacts.

Hurricane Island Center for Science & Leadership | Feb 2023 - Sep 2023

GIS Logistics Coordinator (seasonal)

- Management, procurement, and tracking of purchase orders and supplies necessary to maintain remote research island.
- Field data collection/documentation for aquaculture research initiatives, grant funding outreach, and education.

Federal Emergency Management Agency | Sep 2019 – Jan 2023

GIS Data Coordinator Interagency Coordination Division | Recovery Directorate

- Supported RFI's for GIS products, data, and technical questions.
- HAZUS (Multi-Hazard) Loss Estimation Certification - Emergency Management Institute/ The POLIS Center
- Coordinated data support, ETL processes, display, and acquisition under the National Disaster Recovery Framework for various Recovery Support Function Agencies and SLTT partners at FEMA Headquarters.
- Provided maps and data products using ESRI products, Excel, PIVOT, and ad hoc SQL requests.
- Implemented and advised recovery geospatial data issues in conjunction with National Disaster Recovery Support (NDRS) and National Disaster Recovery Framework (NDRF) on active field operations.
- Collaboration with USDA Rural Development, SBA, HUD, EPA, USPS et al. for GIS data needs.
- Trained new NDRS staff on FEMA data policies, associated PII restrictions: Individual Assistance, Public Assistance, Mitigation, NFIP; cartographic standards, and database management.
- Organized GIS data, storage, and access within numerous Joint Field Office (JFO) locations.
- Cartographic production, data aggregation, and Geoplatform/Portal visualization for various Federal disasters.
- Lead discussion for international Emergency Managers on FEMA's use of GIS technology.
- QA/QC of data products produced by field operations.
- Led stakeholder meetings to ensure understanding of relevant GIS products for Recovery.

Reservist-Federal Emergency Management Agency | Oct 2004 – Jun 2019

- Nationwide field deployments in support of GIS disaster operations.
- Camp Fire Paradise, CA - Analysis on Hazardous Tree Debris, ROE, & data collection app for water quality testing.
- Led data outreach on mapping diaspora from Puerto Rico following Hurricane Maria.

- Developed comprehensive map book used by engineering staff for field visits for post-fire building assessment.
- Locations for visits derived using a “hot-spot” analysis based on structural damage sustained during the Southern California wild-fires (2007) in coordination with CAL FIRE, USGS, NGA.
- Provided comprehensive research on frequency and extent of fire events (2003-2007) based on the metrics of acres burned, total cost, and total number of structures destroyed.
- Presentation and analysis of spatial data through maps and reports for Mitigation-Hazards Performance Analysis Unit.
- Developed methodology to assess and geocode structures under Florida’s Manufactured Housing Anchoring Program.
- Determined compliance of mitigation grant recipients with State regulations by field observations.

NYC Office of Emergency Management | Feb 2014 – Nov 2014
Hurricane Sandy Recovery - Hagerty Consulting

- Utilization of ArcGIS Online for data display and grant management for NYC Office of Management and Budget.
- Geodatabase creation and maintenance for Mitigation Grant tracking under FEMA’s 406 and 428 PAAP program.
- Data sourcing, editing, and geocoding for city wide agencies and stakeholders for mitigation and resiliency (OMB, FDNY, NYPD, NYC Parks, NYC Department of Buildings, New York Rising, Rebuild x Design, DOI)
- LiDAR DEM analysis for flood protection measures under Public Assistance Policy guidelines.

CH2M HILL INC. Atlanta, GA | Jan 2007 – Dec 2007
Staff Level GIS Analyst

- GIS Consultant for City of Milton, Georgia.
- Lead conversion process of CAD drawings, parcel plats, and new development construction documents into GIS format (scanning, digitization, georectification, parcel fabric/topology edits).
- Ensured proper display of internal web-based mapping application: On-Point application was utilized by public works, planning/zoning, police/emergency response, and finance department for taxation.

Response to 4.2 Vendor Responsibilities

Tryfacta has carefully reviewed the “**Vendor Responsibilities**” and “**Agency Responsibilities**” and has established a dedicated **Client Engagement and Delivery Office (CEDO)** to support WVDOT under this contract. This centralized delivery model ensures streamlined communication, rapid response, and consistent service delivery aligned with WVDOT’s operational and technical requirements. Tryfacta will assign a **dedicated, locally available Account Manager, Pradeep Sigh, PMP-certified (single point of contact)**, responsible for all contract-related coordination. WVDOT will have direct access to the CEDO through the Account Manager, who will ensure continuous and effective communication via email, phone, chat, and virtual or in-person meetings, as desired. Contact details of the full Account Management Team will be provided upon award.

With nearly **three decades of experience delivering IT staffing services to government agencies**, Tryfacta has developed structured and scalable processes for sourcing, screening, onboarding, and managing IT professionals. We carefully select candidates for each assignment, ensuring alignment with technical requirements, organizational culture, and performance expectations. Our recruitment process includes **comprehensive screening, technical evaluations, structured interviews, and background verification**, ensuring compliance with all regulatory and diversity requirements.

Proposed Engagement Model: Tryfacta’s engagement approach is built on a **dedicated delivery model**, leveraging specialized resources to fully support WVDOT’s mission and objectives. The CEDO provides both **regular and after-hours support**, enabling rapid response to staffing needs and operational queries. This model allows Tryfacta to:

- Respond quickly to staffing requests and inquiries
- Fill positions with turnaround times as low as **12–24 hours** depending on role complexity
- Maintain a continuous pipeline of qualified, pre-screened IT professionals

The CEDO is designed to deliver **on-demand IT staffing services**, supported by a **24/7 recruitment and deployment engine**. This includes:

- Candidate sourcing and validation
- Background verification and onboarding
- Deployment and replacement management (change management)
- Timesheet and payroll administration

Our client-centric approach has resulted in **over 98% client retention within preferred supplier programs**, reflecting consistent service quality and responsiveness.

Key Service Features

Under this contract, WVDOT will get:

- A **dedicated Account Manager** ensuring timely delivery of qualified IT resources
- **24/7 access** to Tryfacta’s delivery team via multiple communication channels
- End-to-end workforce management including onboarding, compliance, training support, and offboarding
- Availability of candidates for **in-person or virtual interviews**, as required
- Flexible staffing support aligned with project duration and scheduling needs
- Strong compliance controls to mitigate co-employment risks
- Access to **pre-screened, experienced, and background-verified IT professionals**
- Proactive monitoring of performance, turnover, and workforce continuity
- Full administrative support including timesheets, payroll, and issue resolution at no additional cost
- **Comprehensive reporting and analytics** to measure service performance and workforce effectiveness

4.2.1 Bidders must provide an hourly rate for each position they expect to submit qualifications for proposed candidates when the need arises. When presenting candidates for review by the Agency, Vendor shall provide the qualifications of proposed candidates who meet all requirements of the RFQ.

Yes – Tryfacta Accepts. Tryfacta will provide fully burdened hourly rates for each classification proposed and will submit only those candidates who meet or exceed all RFQ requirements at the time of need.

4.2.2 Successful vendors must provide staffing as requested by the Agency. Assignments also may be for a specified period of time and quantity of hours as indicated on each delivery order. Consistent failure on the part of a successful vendor to fulfil requests from the Agency, or consistently being unresponsive to Agency's requests for staffing services, may be grounds for cancellation of the vendor's entire contract.

Yes – Tryfacta Accepts. Tryfacta will provide staffing in accordance with Agency requests, including specified duration and hours. We understand that consistent responsiveness and fulfillment are mandatory and will ensure timely delivery of services.

4.2.3 Successful vendors must provide hourly rates that are inclusive of all costs including, but not limited to, federal, state and local withholding taxes, social security & Medicare taxes as well as all unemployment compensation, workers compensation, general and professional liability premiums. All overhead for the vendor and fringe for the candidate must be included in the successful vendor's hourly rates. All travel expenses must be included in the vendor's hourly rates.

Yes – Tryfacta Accepts. All proposed hourly rates will be fully inclusive of all applicable costs including taxes, insurance, overhead, fringe benefits, and travel expenses.

4.2.4 Successful vendors shall provide the Agency with information on each staffing candidate according to the state and federal standards, including applications. Vendors must include a current resume and a completed qualification documentation for each candidate with their responses. Resumes will identify the candidate's qualifications listed in the requirements section above and will include copies as verification of degrees and certifications. Resume pages will be numbered (ex: 1 of 2, 2 of 2 etc ...). These must be sent to the Agency along with the listing of possible candidates to interview.

Yes – Tryfacta Accepts. Tryfacta will submit complete candidate packages including resumes, qualification documentation, and verification of degrees and certifications in accordance with State and Federal standards.

4.2.5 Successful Vendor must provide (as requested) the legal documentation to support proof that their candidate is a U.S. citizen or eligible to work in the United States.

Yes – Tryfacta Accepts. Tryfacta will provide documentation verifying that all candidates are U.S. citizens or authorized to work in the United States, as required.

4.2.6 Successful vendor having the first priority contract for any classification required by the Agency will be contacted first and will have 48 hours (2 business days) to acknowledge the initial contact request for staffing (in writing, by a means dictated by the Agency on the initial contact request, but likely by email or fax), and must inform the Agency if they are able or unable to fulfill the request. If unable to supply a candidate at the time, Vendor must provide a written waiver to the Agency within this same 48 hours (2 business days) timeframe. Failure to provide a written waiver will serve as a waiver as it pertains to the Agency's ability to proceed to contacting lower priority vendors. However, repeated failure to provide a written waiver may be grounds for cancellation of a vendor's entire contract (ie, all awarded classifications).

If able to supply candidate(s), Vendor must provide to the Agency a list of potential candidates for staffing needs within 2 weeks (10 business days) of the initial notification of need. Vendors must provide all documentation for every candidate who indicates they meet the requirements for the classification, including a qualifications document, template supplied by the agency, and resumes. Vendors may send multiple resumes so the agency may choose the most appropriate candidate.

Should a vendor not respond within the allowed number of days from the original notice of the Agency need (e.g., 2 days to confirm/waiver a request; 10 business days to provide a list of candidates), the vendor with the second priority contract and other priority vendors for the classification will be contacted and given the opportunity to provide needed staffing. Evaluation will be completed in order of priority.

This second vendor will follow the same process as the first vendor; then the third vendor, and so on, until either a vendor successfully provides a staffing candidate, or all vendors qualifying for award of a contract for that classification are contacted.

No second opportunity to meet the need will be given to any vendor until all vendors have been contacted in order of award.

The Vendor's provided candidate must consistently perform the contracted duties as outlined in these specifications or in the project-specific scope included within any Delivery Order. The Agency will notify the awarded vendor if a Vendor's employee fails to consistently perform the contracted duties. The Agency may, as part of this notification, request the Vendor replace the candidate; if so, the Vendor has 2 weeks (10 business days) from this notification to provide the qualifications for a replacement. If the vendor provided a candidate under false documentation, that will be grounds for cancellation of the Delivery Order.

Yes – Tryfacta Accepts. Tryfacta will acknowledge Agency requests within 48 hours and will provide qualified candidate submissions within 10 business days. We fully understand and will comply with the priority-based vendor engagement process.

4.2.7 The successful candidate(s) will be required to present a timesheet for approval on a regular basis not less than a one (1) week period and not more than monthly.

Yes – Tryfacta Accepts. Tryfacta will ensure all candidates submit timesheets in accordance with Agency requirements (weekly to monthly).

4.2.8 If during the term of the Delivery Order the candidate placed by the vendor leaves the company and/or has to be replaced; the vendor must give written notice to the Agency within one (1) business day, explaining the circumstances of departure, and must replace the candidate with another candidate meeting or surpassing all the requirements for the filled classification listed in Section 4.1 of this contract to maintain continuity of services. Vendor must provide to the Agency a list of potential candidates for the replacement staffing needs within 2 weeks (10 business days) of the notification of replacement. Vendors must provide documentation and resumes for every candidate which indicates their meeting the requirements for the classification. Vendors may send multiple resumes so that the agency may choose. Any interruption of service greater than ten (10) business days will be grounds for cancellation of the Delivery Order. If the Agency needs to issue a secondary Delivery Order to cover any cancelled Delivery Order, they are not required to contact or acquire waivers from any vendor for which they had previously contacted to fill the

classification (copies of the original waivers and documentation regarding the cancellation should be kept in the files for both the original the replacement Delivery Order(s)).

Yes – Tryfacta Accepts. Tryfacta will notify the Agency within one business day of any candidate departure and will provide qualified replacement candidates within 10 business days to ensure uninterrupted service delivery.

4.2.9 Successful Vendors and candidates must comply with all Agency policies and procedures. Any access or user accounts issued to a candidate to permit work in the State computing environment are subject to revocation without notice, and random or periodic audit of user activity may be conducted by the Agency

Yes – Tryfacta Accepts. Tryfacta and its personnel will comply with all Agency policies, procedures, and security requirements, including system access controls and audit provisions.

Small, Women-Owned, Or Minority-Owned Businesses Certification:



ERIC L. HOUSEHOLDER
CABINET SECRETARY

STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION

SAMANTHA WILLIS
PURCHASING DIRECTOR

March 24, 2026

TRYFACTA INC
4637 CHABOT DR STE 100
PLEASANTON, CA 94588

Adesh Tyagi:

This is to notify you that your Small, Women-, and Minority-Owned Businesses (SWAM) Certification Application has been approved based on your representations that TRYFACTA INC, wvOASIS vendor # VS0000037660, meets the definition of a Small, Women-, and Minority-Owned Businesses as set forth in the **West Virginia Code of State Rules** 148-22-1 et seq. This two-year certification period is now effective and will expire:

01/09/2028

This certification shall automatically expire without notice two years after the effective date unless revoked by the Purchasing Director or upon expiration pursuant to the **West Virginia Code of State Rules** 148-22-8. The type(s) of Small, Women-, and Minority-Owned Businesses (SWAM) Certification approved for your entity:

Women-Owned Business	Minority-Owned Business
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At the end of your two-year certification period, if you wish to reapply, please complete a WV-IA form or apply for re-certification through the Vendor Self-Service portal at wvOASIS.gov. Complete renewal instructions, application forms, and a list of West Virginia's Small, Women-, and Minority-Owned Businesses (SWAM) Certification entities are available online at www.state.wv.us/admin/purchase/VendorReg.html.

If you have questions, please contact the West Virginia Purchasing Division at 304-558-2311.

Sincerely,

Michelle Chandler
Vendor Registration Coordinator

Exceptions And Clarifications

The Solicitation contains the specifications that shall form the basis of a contractual agreement. **Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid.** Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.

Tryfacta, Inc. has reviewed all solicitation requirements and hereby confirms that it **takes no exceptions, clarifications, or proposed modifications** to the terms, conditions, and specifications outlined in this RFQ.

REQUEST FOR QUOTATION WVDOT Information Technology Temporary Staffing Services (81260081)

SPECIFICATIONS

- 1. PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Department of Transportation (WVDOT) to establish multiple open-ended contracts for information technology temporary technical staffing services. This contract shall cover the following position classifications:

1. Senior Mainframe Application Analyst
2. Mainframe Application Analyst
3. Senior Application Oracle Database Administrator
4. Application Oracle Database Administrator
5. Senior Application DB2 Database Administrator
6. Application DB2 Database Administrator
7. PC Programmer Analyst
8. Senior PC Programmer Analyst
9. Application SQL Server Database Administrator
10. Senior Application SQL Server Database Administrator
11. GIS Database Administrator
12. Senior GIS Database Administrator
13. GIS Architect
14. GIS Application Developer
15. Senior GIS Application Developer

The position classifications listed above are to provide for the technical expertise to meet the contracted staffing needs for all entities within the West Virginia Department of Transportation for support of the department's IT efforts. These services would be used to develop modifications and enhancements to the computer systems for the end-user State agency, as well as mentor, provide technical training and support and provide "shadowing" opportunities for State analysts, among other tasks as defined by the end-user State agency on its Delivery Order for the services.

Though the majority of the requested services are likely to be for work in the metro-Charleston, WV area, during the life of the contract, the end-user Agency may be located in, and may request services be provided in the entire State of West Virginia.

BACKGROUND & CURRENT OPERATING ENVIRONMENT: The end-user Agencies manage many systems (some specifically designed for the Agencies) that support various applications for the State of West Virginia. These systems have varying platforms. Mainframe - DB2 and VSAM. Client server- Visual Studio, both Microsoft SQL Server and Oracle databases. At times, these Agencies require additional technical expertise and support to accomplish specific project goals for these systems.

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REQUEST FOR QUOTATION
WVDOT Information Technology Temporary Staffing Services (81260081)

- 2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.
- 2.1 “Contract Services”** means providing temporary staffing services for the list of classifications identified in Section 1 (above) and/or Section 4.1 (below) as more fully described in these specifications.
 - 2.2 “Pricing Page”** means the pages, contained wvOASIS or attached hereto as Exhibit A, upon which Vendor should list its proposed price for the Contract Services.
 - 2.3 “Solicitation”** means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
 - 2.4 “DB2”** means IBM’s DB2 database software.
 - 2.5 “Oracle”** is an object-relational database developed by Oracle Corporation.
 - 2.6 “Microsoft SQL Server”** is a relational database developed by Microsoft.
 - 2.7 “Visual Studio”** is a source code editor that runs on the Windows operating system for personal computers.
 - 2.8 “.NET”** means Microsoft’s .NET or .NET Framework software.
 - 2.9 “SDLC”** means Software or Systems Development Life Cycle, a standard term to describe the process of planning for, creating, testing, and deploying software or systems applications.

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3. QUALIFICATIONS: Vendor, or Vendor's staff if requirements are inherently limited to individuals rather than corporate entities, shall have the following minimum qualifications:

3.1. Vendors shall have been in business a minimum of five (5) years, providing similar information technology services. Vendors must provide documentation to indicate that their company meets this requirement prior to award; however, bidders may include this documentation with their bid.

3.2. Vendors shall be able to demonstrate their potential to provide these services by providing documentation to indicate they have provided staffing of at least six (6) individuals within the listed classifications within the past five (5) years: documentation should include enough information to indicate that the Vendor provided an employee meeting the requirements of a specifically named classification from Section 1, above: the documentation should name the entity to whom the individual was supplied and provide contact information for that entity. Vendors must provide documentation to indicate that their company meets this requirement prior to award; however, bidders may include this documentation with their bid.

4. MANDATORY REQUIREMENTS:

4.1 Mandatory Contract Services Requirements and Deliverables: Contract Services must meet or exceed the mandatory requirements listed below.

4.1.1 Senior Mainframe Application Analyst:

4.1.1.1 Senior Mainframe Application Analyst must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of five (5) years of equivalent work experience as a substitution for the Bachelor's Degree.

4.1.1.2 Senior Mainframe Application Analyst must have a minimum of five (5) years of Mainframe Application development experience using COBOL, CICS, and JCL.

4.1.1.3 Senior Mainframe Application Analyst must have a minimum of five (5) years of Relational Database experience.

4.1.1.4 Senior Mainframe Application Analyst must have a minimum of five (5) years of Analysis and Design experience.

4.1.1.5 Senior Mainframe Application Analyst must have a minimum of three (3) years of experience as a lead analyst or in a senior analyst role.

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4.1.1.6 Senior Mainframe Application Analyst should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.2 Mainframe Application Analyst:

4.1.2.1 Mainframe Application Analyst must have a minimum of three (3) years of Mainframe Application development experience using COBOL, CICS, and JCL.

4.1.2.2 Mainframe Application Analyst must have a minimum of three (3) years of Relational Database experience.

4.1.2.3 Mainframe Application Analyst must have a minimum of three (3) years of Analysis and Design experience.

4.1.2.4 Mainframe Application Analyst should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.3 Senior Application Oracle Database Administrator:

4.1.3.1 Senior Application Oracle Database Administrator must have a minimum of ten (10) years of experience with the maintenance and management of Oracle database systems.

4.1.3.2 Senior Application Oracle Database Administrator must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of six (6) years of equivalent work experience as a substitution for the Bachelor's Degree.

4.1.3.3 Senior Application Oracle Database Administrator must have a minimum of five (5) years of experience in providing connectivity to an Oracle

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database.

- 4.1.3.4 Senior Application Oracle Database Administrator must have a minimum of five (5) years providing assistance to programming staff in debugging triggers, procedures, functions, and packages (PL/SQL Code).
- 4.1.3.5 Senior Application Oracle Database Administrator must have a minimum of five (5) years of experience optimizing SQL execution for Oracle SQL procedures, functions, packages, and triggers.
- 4.1.3.6 Senior Application Oracle Database Administrator must have a minimum of five (5) years of experience writing and maintaining UNIX/LINUX shell scripts in HP UNIX and/or RedHat LINUX environment.
- 4.1.3.7 Senior Application Oracle Database Administrator must have a minimum of five (5) years of experience in Data Modeling.
- 4.1.3.8 Senior Application Oracle Database Administrator must have a minimum of five (5) years of experience in the utilization of Oracle RMAN backup to include full and incremental backups and cloning a database.
- 4.1.3.9 Senior Application Oracle Database Administrator must have a minimum of two (2) years of experience using and administering Oracle Warehouse Builder.
- 4.1.3.10 Senior Application Oracle Database Administrator must have a minimum of two (2) years in fine grain access control in an Oracle database.

4.1.4 Application Oracle Database Administrator:

- 4.1.4.1 Application Oracle Database Administrator must have a minimum of five (5) years of experience with the maintenance and management of Oracle database systems.
- 4.1.4.2 Application Oracle Database Administrator must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of three (3) years of equivalent work experience as a substitution for the Bachelor's Degree.
- 4.1.4.3 Application Oracle Database Administrator must have a minimum of two (2) years of experience in providing connectivity to an Oracle Database.

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- 4.1.4.4 Application Oracle Database Administrator must have a minimum of two (2) years providing assistance to programming staff in debugging triggers, procedures, functions, and packages (PL/SQL Code).
- 4.1.4.5 Application Oracle Database Administrator must have a minimum of two (2) years in optimizing SQL execution for Oracle SQL procedures, functions, packages, and triggers.
- 4.1.4.6 Application Oracle Database Administrator must have a minimum of two (2) years of experience in writing and maintaining UNIX/LINUX shell scripts in HP UNIX and/or RedHat LINUX environment.
- 4.1.4.7 Application Oracle Database Administrator must have a minimum of two (2) years of experience in the utilization of Oracle RMAN backup to include full and incremental backups and cloning a database.

4.1.5 Senior Application DB2 Database Administrator:

- 4.1.5.1 Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience with the maintenance and management of DB2 database systems.
- 4.1.5.2 Senior Application DB2 Database Administrator must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of five (5) years of equivalent work experience as a substitution for the Bachelor's Degree.
- 4.1.5.3 Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience in managing permissions for a DB2 database.
- 4.1.5.4 Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience providing assistance to programming staff in debugging triggers, procedures, functions, and packages.
- 4.1.5.5 Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience optimizing SQL execution for DB2 SQL procedures, functions, packages, and triggers.
- 4.1.5.6 Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience in Data Modeling.

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- 4.1.5.7** Senior Application DB2 Database Administrator must have a minimum of five (5) years of experience developing and performing disaster recovery procedures.
- 4.1.5.8** Senior Application DB2 Database Administrator should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.6 Application DB2 Database Administrator:

- 4.1.6.1** Application DB2 Database Administrator must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution or a minimum of six (6) years of equivalent work experience as a substitution for the Bachelor's Degree.
- 4.1.6.2** Application DB2 Database Administrator must have a minimum of four (4) years of experience with the maintenance and management of DB2 database systems.
- 4.1.6.3** Application DB2 Database Administrator must have a minimum of three (3) years of experience in managing permissions for a DB2 database.
- 4.1.6.4** Application DB2 Database Administrator must have a minimum of three (3) years of experience providing assistance to programming staff in debugging triggers, procedures, functions, and packages.
- 4.1.6.5** Application DB2 Database Administrator must have a minimum of three (3) years in optimizing SQL execution for DB2 SQL procedures, functions, packages, and triggers.
- 4.1.6.6** Application DB2 Database Administrator must have a minimum of three (3) years of experience in Data Modeling.
- 4.1.6.7** Application DB2 Database Administrator must have a minimum of three (3) years of experience developing and performing disaster recovery procedures.

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4.1.6.8 Application DB2 Database Administrator should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.7 PC Programmer Analyst:

4.1.7.1 PC Programmer Analyst must have a minimum of a Bachelor's degree from an accredited college or university in computer science or related field including but not limited to business data programming, business systems analysis, computer servicing technologies, information systems management, data processing or computer engineering, **OR** a minimum of an associate's degree and eighteen (18) months of equivalent work experience **OR** a minimum of three (3) years equivalent work experience.

4.1.7.2 PC Programmer Analyst must have a minimum of three (3) years of experience with database management, documentation project control techniques, data processing concepts, and equipment usage.

4.1.7.3 PC Programmer Analyst must have a minimum of three (3) years of experience developing and maintaining complex systems and evaluating and analyzing system requests to develop work plans for system development and maintenance.

4.1.7.4 PC Programmer Analyst should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.8 Senior PC Programmer Analyst:

4.1.8.1 Senior Programmer Analyst must have a minimum of a Bachelor's degree from an accredited college or university in computer science or related field including but not limited to business data programming, business systems analysis, computer servicing technologies, information systems management, data processing or computer engineering, **OR** a minimum of an associate's degree and eighteen (18) months of equivalent work experience **OR** a minimum of five (5) years equivalent work experience.

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- 4.1.8.2** Senior PC Programmer Analyst must have a minimum of five (5) years of experience with database management, documentation project control techniques, data processing concepts, and equipment usage.
- 4.1.8.3** Senior PC Programmer Analyst must have a minimum of five (5) years of experience developing and maintaining complex systems and evaluating and analyzing system requests to develop work plans for system development and maintenance.
- 4.1.8.4** Senior PC Programmer Analyst should have excellent communication skills (both verbal and written) to communicate with various stakeholders, including, but not limited to, project managers, business analysts, database administrators, and application analysts, as well as business policy staff and workers.

4.1.9 Application SQL Server Database Administrator:

- 4.1.9.1** Application SQL Server Database Administrator must have a minimum of five (5) years of experience with the maintenance and management of SQL Server database systems
- 4.1.9.2** Application SQL Server Database Administrator must have a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of three (3) years of equivalent work experience.
- 4.1.9.3** Application SQL Server Database Administrator must have a minimum of two (2) years of experience in providing connectivity to a SQL Server database.
- 4.1.9.4** Application SQL Server Database Administrator must have a minimum of two (2) years of experience in providing assistance to programming staff in debugging triggers, procedures, functions, and packages (T-SQL Code).
- 4.1.9.5** Application SQL Server Database Administrator must have a minimum of two (2) years of experience in optimizing SQL execution for SQL Server procedures, functions, packages, and triggers.

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- 4.1.9.6 Application SQL Server Database Administrator must have a minimum of two (2) years of experience in writing and maintaining UNIX/LINUX shell scripts in HP UNIX and/or RedHat LINUX environment.
- 4.1.9.7 The SQL Server Database Administrator application requires a minimum of two (2) years of experience in utilizing SQL Server backup functionality, including full and incremental backups, as well as database cloning.

4.1.10 Senior Application SQL Server Database Administrator:

- 4.1.10.1 Senior Application SQL Server Database Administrator must have a minimum of ten (10) years of experience with the maintenance and management of SQL Server database systems.
- 4.1.10.2 Senior Application SQL Server Database Administrator must have a minimum of a Bachelor's degree in Computer Science or a related field from an accredited institution, or a minimum of six (6) years of equivalent work experience as a substitution for the Bachelor's Degree. (
- 4.1.10.3 Senior Application SQL Server Database Administrator must have a minimum of five (5) years of experience in providing connectivity to an SQL Server database.
- 4.1.10.4 Senior Application SQL Server Database Administrator must have a minimum of five (5) years providing assistance to programming staff in debugging triggers, procedures, functions, and packages (T-SQL Code).
- 4.1.10.5 Senior Application SQL Server Database Administrator must have a minimum of five (5) years of experience in optimizing SQL execution for SQL Server procedures, functions, packages, and triggers.
- 4.1.10.6 Senior Application SQL Server Database Administrator must have a minimum of five (5) years of experience writing and maintaining UNIX/LINUX shell scripts in HP UNIX and/or RedHat LINUX environment.
- 4.1.10.7 Senior Application SQL Server Database Administrator must have a minimum of five (5) years of experience in Data Modeling.
- 4.1.10.8 Senior Application SQL Server Database Administrator must have a minimum of five (5) years of experience in SQL Server backup

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functionality, including full and incremental backups, as well as database cloning.

4.1.10.9 Senior Application SQL Server Database Administrator must have a minimum of two (2) years of experience using and administering SQL Server data warehouse building functionality.

4.1.10.10 Senior Application SQL Server Database Administrator must have a minimum of two (2) years in fine grain access control in a SQL Server database.

4.1.11 GIS Database Administrator:

4.1.11.1 GIS Database Administrator must have a minimum of three (3) years of experience with the maintenance and management of enterprise GIS database systems, including Esri ArcGIS Enterprise, ArcSDE, and relational database platforms such as Oracle, SQL Server, or PostgreSQL/PostGIS.

4.1.11.2 GIS Database Administrator must have a Bachelor's degree in Computer Science, Geography, Geomatics, or a related field from an accredited institution, or a minimum of three (3) years of equivalent work experience.

4.1.11.3 GIS Database Administrator must have a minimum of two (2) years of experience in providing connectivity between GIS applications and enterprise databases, including configuration of ArcGIS services, database connections, and integration with web-based GIS applications.

4.1.11.4 GIS Database Administrator must have a minimum of two (2) years of experience in providing assistance to GIS analysts and programming staff in debugging stored procedures, spatial queries, geoprocessing scripts, and database functions.

4.1.11.5 GIS Database Administrator must have a minimum of two (2) years of experience in optimizing spatial SQL execution for procedures, functions, packages, triggers, and geospatial queries to ensure high performance of GIS applications.

4.1.11.6 GIS Database Administrator application requires a minimum of two (2) years of experience in utilizing enterprise database backup functionality, including full and incremental backups, spatial database replication, and database cloning for GIS environments.

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4.1.12 Senior GIS Database Administrator

- 4.1.12.1** Senior GIS Database Administrator must have a minimum of seven (7) years of experience with the maintenance, management, and optimization of enterprise GIS database systems, including Esri ArcGIS Enterprise, ArcSDE, and relational database platforms such as Oracle, SQL Server, or PostgreSQL/PostGIS.
- 4.1.12.2** Senior GIS Database Administrator must have a Bachelor's degree in Computer Science, Geography, Geomatics, or a related field from an accredited institution, or a minimum of five (5) years of equivalent work experience. A Master's degree is preferred.
- 4.1.12.3** Senior GIS Database Administrator must have a minimum of three (3) years of experience in providing connectivity between GIS applications and enterprise databases, including configuration of ArcGIS services, database connections, and integration with enterprise IT systems.
- 4.1.12.4** Senior GIS Database Administrator must have a minimum of three (3) years of experience in providing advanced assistance to GIS analysts and programming staff in debugging stored procedures, spatial queries, geoprocessing scripts, triggers, and database functions.
- 4.1.12.5** Senior GIS Database Administrator must have a minimum of three (3) years of experience in optimizing spatial SQL execution for procedures, functions, packages, triggers, and geospatial queries to ensure high performance and scalability of GIS applications.
- 4.1.12.6** Senior GIS Database Administrator application requires a minimum of three (3) years of experience in utilizing enterprise database backup functionality, including full and incremental backups, spatial database replication, disaster recovery planning, and database cloning for GIS environments.

4.1.13 GIS Architect

- 4.1.13.1** GIS Architect must have a minimum of ten (10) years of experience in the design, implementation, and management of enterprise GIS systems, including Esri ArcGIS Enterprise, ArcGIS Online, ArcSDE, and relational database platforms such as Oracle, SQL Server, or PostgreSQL/PostGIS.

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- 4.1.13.2 GIS Architect must have a Bachelor's degree in Computer Science, Geography, Geomatics, Information Systems, or a related field from an accredited institution, or a minimum of seven (7) years of equivalent work experience. A Master's degree is preferred.
- 4.1.13.3 GIS Architect must have a minimum of five (5) years of experience in designing enterprise GIS architectures, including system integration, scalability planning, cloud deployment (Azure/AWS), and high-availability configurations.
- 4.1.13.4 GIS Architect must have a minimum of five (5) years of experience in providing technical leadership and guidance to GIS database administrators, analysts, and developers, including establishing standards, best practices, and governance frameworks.
- 4.1.13.5 GIS Architect must have a minimum of five (5) years of experience in optimizing enterprise GIS performance, including spatial SQL tuning, service load balancing, and distributed geoprocessing workflows.
- 4.1.13.6 GIS Architect application requires a minimum of three (3) years of experience in enterprise-level disaster recovery planning, including backup and replication strategies, failover systems, and business continuity planning for GIS environments.
- 4.1.13.7 GIS Architect must have demonstrated experience in leading enterprise GIS modernization initiatives, including migration to cloud platforms, integration with enterprise IT systems, and adoption of emerging geospatial technologies.

4.1.14 GIS Application Developer

- 4.1.14.1 GIS Application Developer must have a minimum of five (5) years of experience in designing, developing, and maintaining GIS applications using Esri ArcGIS Enterprise, ArcGIS Online, ArcGIS Pro SDK, and web-based GIS frameworks.
- 4.1.14.2 GIS Application Developer must have a Bachelor's degree in Computer Science, Geography, Geomatics, Information Systems, or a related field from an accredited institution, or a minimum of three (3) years of equivalent work experience.

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- 4.1.14.3** GIS Application Developer must have a minimum of two (2) years of experience in developing web-based GIS applications using JavaScript, Python, .NET, or other programming languages, including use of Esri's ArcGIS API for JavaScript and REST services.
- 4.1.14.4** GIS Application Developer must have a minimum of two (2) years of experience in integrating GIS applications with enterprise databases such as SQL Server, Oracle, or PostgreSQL/PostGIS, including spatial query development and optimization.
- 4.1.14.5** GIS Application Developer must have a minimum of two (2) years of experience in providing assistance to GIS analysts and programming staff in debugging geoprocessing scripts, web services, and application workflows.
- 4.1.14.6** GIS Application Developer must have a minimum of two (2) years of experience in optimizing GIS application performance, including map service tuning, caching strategies, and efficient use of spatial data.
- 4.1.14.7** GIS Application Developer application requires a minimum of two (2) years of experience in utilizing version control systems such as Git, and in implementing software development best practices including Agile methodologies, unit testing, and continuous integration.

4.1.15 Senior GIS Application Developer:

- 4.1.15.1** Senior GIS Application Developer must have a minimum of seven (7) years of experience in designing, developing, and maintaining enterprise GIS applications using Esri ArcGIS Enterprise, ArcGIS Online, ArcGIS Pro SDK, and web-based GIS frameworks.
- 4.1.15.2** Senior GIS Application Developer must have a Bachelor's degree in Computer Science, Geography, Geomatics, Information Systems, or a related field from an accredited institution, or a minimum of five (5) years of equivalent work experience. A Master's degree is preferred.
- 4.1.15.3** Senior GIS Application Developer must have a minimum of three (3) years of experience in leading the development of web-based GIS applications, including use of Esri's ArcGIS API for JavaScript, Python, .NET, and REST services.
- 4.1.15.4** Senior GIS Application Developer must have a minimum of three (3) years of experience in integrating GIS applications with enterprise

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databases such as SQL Server, Oracle, or PostgreSQL/PostGIS, including advanced spatial query development, optimization, and schema design.

4.1.15.5 Senior GIS Application Developer must have a minimum of three (3) years of experience in providing advanced assistance to GIS analysts and programming staff in debugging geoprocessing scripts, web services, and application workflows.

4.1.15.6 Senior GIS Application Developer must have a minimum of three (3) years of experience in optimizing GIS application performance, including map service tuning, caching strategies, distributed geoprocessing, and enterprise-level scalability planning.

4.1.15.7 Senior GIS Application Developer must have a minimum of three (3) years of experience in writing and maintaining automation scripts in Python, UNIX/LINUX shell scripting, or similar environments for GIS application deployment, monitoring, and maintenance.

4.1.15.8 Senior GIS Application Developer application requires a minimum of three (3) years of experience in utilizing version control systems such as Git, and in implementing software development best practices including Agile methodologies, unit testing, and continuous integration/continuous deployment (CI/CD).

4.2 VENDOR RESPONSIBILITIES

4.2.1 Bidders must provide an hourly rate for each position they expect to submit qualifications for proposed candidates when the need arises. When presenting candidates for review by the Agency, Vendor shall provide the qualifications of proposed candidates who meet all requirements of the RFQ.

4.2.2 Successful vendors must provide staffing as requested by the Agency. Assignments also may be for a specified period of time and quantity of hours as indicated on each delivery order. Consistent failure on the part of a successful vendor to fulfill requests from the Agency, or consistently being unresponsive to Agency's requests for staffing services, may be grounds for cancellation of the vendor's entire contract.

4.2.3 Successful vendors must provide hourly rates that are inclusive of all costs including, but not limited to, federal, state and local withholding taxes, social

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security & Medicare taxes as well as all unemployment compensation, workers compensation, general and professional liability premiums. All overhead for the vendor and fringe for the candidate must be included in the successful vendor's hourly rates. All travel expenses must be included in the vendor's hourly rates.

- 4.2.4 Successful vendors shall provide the Agency with information on each staffing candidate according to the state and federal standards, including applications. Vendors must include a current resume and a completed qualification documentation for each candidate with their responses. Resumes will identify the candidate's qualifications listed in the requirements section above and will include copies as verification of degrees and certifications. Resume pages will be numbered (ex: 1 of 2, 2 of 2 etc...). These must be sent to the Agency along with the listing of possible candidates to interview.
- 4.2.5 Successful Vendor must provide (as requested) the legal documentation to support proof that their candidate is a U.S. citizen or eligible to work in the United States.
- 4.2.6 Successful vendor having the first priority contract for any classification required by the Agency will be contacted first and will have 48 hours (2 business days) to **acknowledge the initial contact request for staffing** (in writing, by a means dictated by the Agency on the initial contact request, but likely by email or fax), and **must inform the Agency if they are able or unable to fulfill the request**. If unable to supply a candidate at the time, Vendor must provide a written waiver to the Agency within this same 48 hours (2 business days) timeframe. Failure to provide a written waiver will serve as a waiver as it pertains to the Agency's ability to proceed to contacting lower priority vendors. However, repeated failure to provide a written waiver may be grounds for cancellation of a vendor's entire contract (ie, all awarded classifications).

If able to supply candidate(s), Vendor must provide to the Agency a list of potential candidates for staffing needs within 2 weeks (10 business days) of the initial notification of need. Vendors must provide all documentation for every candidate who indicates they meet the requirements for the classification, including a qualifications document, template supplied by the agency, and resumes. Vendors may send multiple resumes so the agency may choose the most appropriate candidate.

Should a vendor not respond within the allowed number of days from the original notice of the Agency need (eg, 2 days to confirm/waiver a request; 10 business days to provide a list of candidates), the vendor with the second priority contract and other priority vendors for the classification will be contacted and given the opportunity to provide needed staffing. Evaluation will be completed in order of priority.

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This second vendor will follow the same process as the first vendor; then the third vendor, and so on, until either a vendor successfully provides a staffing candidate, or all vendors qualifying for award of a contract for that classification are contacted. No second opportunity to meet the need will be given to any vendor until all vendors have been contacted in order of award.

The Vendor's provided candidate must consistently perform the contracted duties as outlined in these specifications or in the project-specific scope included within any Delivery Order. The Agency will notify the awarded vendor if a Vendor's employee fails to consistently perform the contracted duties. The Agency may, as part of this notification, request the Vendor replace the candidate; if so, the Vendor has 2 weeks (10 business days) from this notification to provide the qualifications for a replacement. If the vendor provided a candidate under false documentation, that will be grounds for cancellation of the Delivery Order.

- 4.2.7** The successful candidate(s) will be required to present a timesheet for approval on a regular basis not less than a one (1) week period and not more than monthly.

- 4.2.8** If during the term of the Delivery Order the candidate placed by the vendor leaves the company and/or has to be replaced; the vendor must give written notice to the Agency within one (1) business day, explaining the circumstances of departure, and must replace the candidate with another candidate meeting or surpassing all the requirements for the filled classification listed in Section 4.1 of this contract to maintain continuity of services. Vendor must provide to the Agency a list of potential candidates for the replacement staffing needs within 2 weeks (10 business days) of the notification of replacement. Vendors must provide documentation and resumes for every candidate which indicates their meeting the requirements for the classification. Vendors may send multiple resumes so that the agency may choose. Any interruption of service greater than ten (10) business days will be grounds for cancellation of the Delivery Order. If the Agency needs to issue a secondary Delivery Order to cover any cancelled Delivery Order, they are not required to contact or acquire waivers from any vendor for which they had previously contacted to fill the classification (copies of the original waivers and documentation regarding the cancellation should be kept in the files for both the original the replacement Delivery Order(s)).

- 4.2.9** Successful Vendors and candidates must comply with all Agency policies and procedures. Any access or user accounts issued to a candidate to permit work in the State computing environment are subject to revocation without notice, and random or periodic audit of user activity may be conducted by the Agency.

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4.3 DUTIES AND RESPONSIBILITIES OF THE AGENCY

4.3.1 Ordering Procedure: Agency will notify (in writing) the successful Vendor with the current priority for any classification of the number of candidates needed, the total number of hours required for the assignment/project, the proposed length of the assignment, the basic description of the project for which the candidate will be used, and any assignment/project-specific requirements. Agency may issue multiple notifications to the same vendor to simultaneously request the same or different classifications, for the same or different assignments; the Agency has full discretion on how they wish to organize and issue notifications to the Vendor with current priority; the Vendor may confirm or waive any individual notification in its entirety, but may not partially confirm or waive a notification without express written approval of the Agency (ie, the Agency should indicate on its notification for more than a single quantity of any classification whether or not it is willing to allow the Vendor to partially confirm or waive.) For example, the Agency requires two Mainframe Application Analyst for an assignment. If they are willing to allow the first priority Vendor to provide one while waiving the other, they should indicate this in the notification.

Upon receipt of required documents, interviews will be conducted, and review of qualifications will be performed by the Agency in order to verify the candidate meets the requirements for the requested classification.

After the Agency has chosen the candidate from those provided by the Vendor, the Agency will notify the vendor for a signed, dated quote (see Vendor Responsibilities, above), then complete a Delivery Order noting the Candidate, the Hourly Rate, the Quantity of Hours required for the project, start and end dates for the Delivery Order/Project, and any other information or requirements pertinent to the project for each classification requested.

Delivery Orders in excess of \$250,000.00 shall require processing as Centralized Delivery Orders through the WV State Purchasing Division. Orders of \$250,000.00 or under will be processed as Agency Delivery Orders. Signed, dated vendor quote shall be included with each Delivery Order (ie, scanned and electronically attached in wvOASIS).

4.3.2 Successful Vendor(s)' candidate shall work under Agency supervision. The Agency shall be solely responsible to provide each candidate with day-to-day guidance in the execution of responsibilities at the Agency.

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4.3.3 Agency reserves the right to terminate the candidate selected for a position providing services to the Agency without cause if it is determined to be in the best interest and well-being of the Agency. Termination would occur by cancellation of the remainder of the Delivery Order and does not require prior notification to the Vendor.

4.3.4 Independent Contractor Status: The purpose of this contract is to obtain temporary services that are provided by individuals or entities as independent contractors and not as employees of the State of West Virginia. The distinction between an independent contractor and an employee is complex and can require an analysis of 20 or more factors relating to the circumstances of each contract. The Internal Revenue Service and the U.S. Department of Labor have provided guidance on this issue at:

IRS – <http://www.irs.gov/pub/irs-pdf/p15a.pdf>

IRS – <http://www.irs.gov/Businesses/Small-Businesses-&Self-Employed/Independent-Contractor-Self-Employed-or-Employee>

DOL – <http://www.dol.gov/elaws/esa/flsa/docs/contractors.asp>

Prior to utilizing the services available under this contract, each agency must ensure that factors relating to the broad categories of behavioral control, financial control, and the type of relationship between the state and the temporary worker will not cause the independent contractor relationship to be construed as an employee/employer relationship. Items that must be considered include but are not limited to, the degree of control exercised by the State over the temporary worker relating to performance of the job and the degree to which the temporary worker is integrated into the State's system. The Purchasing Division recommends that each agency review the IRS and DOL publications found at the links above and obtain further assurance from their respective internal legal counsel to maintain the independent contractor status of individuals and entities hired under this contract.

4.3.5 It is the sole responsibility of the Agency to insure that they are notifying the appropriately prioritized vendor for each classification; the Vendor is not responsible for determining if the Agency has acquired the necessary waiver from, or documented the non-responsiveness of, any other vendor in order for them to be appropriately contacting the current Vendor.

5. CONTRACT AWARD:

5.1 Contract Award: The Contract is intended to provide the Agency with a purchase price for all of the Contract Services, and it is the State's intent to award multiple contracts to ensure that every classification can be adequately supplied during the life

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of the Contract. Each classification will be considered separately for award purposes. The qualified bidder providing the lowest Total Price on the Pricing Page for a classification will be awarded the First Priority Contract for that classification. The qualified bidder providing the second lowest Classification Total Hourly Rate for a classification will be awarded the Second Priority Contract for that classification, and so on, until such time that at most five (5) Contracts are awarded for that classification. Bidders may be awarded none, any or all classifications, as is necessary to award for each classification.

Upon award of the resulting Contract(s), a spreadsheet will be included with each Contract indicating the priority each vendor has for each awarded classification. An indicator of "1" on the spreadsheet contract Pricing Synopsis shall indicate First Priority; "2" shall indicate Second Priority, etc.

5.2 Pricing Page: Vendor should complete the Pricing Page by providing the all-inclusive hourly rate to provide a candidate meeting the requirements for each classification. Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified. However, Vendors may opt to bid only certain classifications. If not bidding a classification/commodity line, bidders should clearly note a "no bid" or "N/A" on their bid. Vendors may opt to bid different hourly rates for each renewal year.

Vendor should type or electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document. In most cases, the Vendor can request an electronic copy of the Pricing Pages for bid purposes by sending an email request to the following address: John.W.Estep@wv.gov.

- 6. PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.
- 7. PAYMENT:** Agency shall pay only the hourly rate as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.
- 8. TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.

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9. FACILITIES ACCESS: Performance of Contract Services may require access cards and/or keys to gain entrance to Agency’s facilities. In the event that access cards and/or keys are required:

- 9.1. Vendor must identify principal service personnel which will be issued access cards and/or keys to perform service.
- 9.2. Vendor will be responsible for controlling cards and keys and will pay replacement fee, if the cards or keys become lost or stolen.
- 9.3. Vendor shall notify Agency immediately of any lost, stolen, or missing card or key.
- 9.4. Anyone performing under this Contract will be subject to Agency’s security protocol and procedures.
- 9.5. Vendor shall inform all staff of Agency’s security protocol and procedures.

10. VENDOR DEFAULT:

- 10.1. The following shall be considered a vendor default under this Contract.
 - 10.1.1. Failure to perform Contract Services in accordance with the requirements contained herein.
 - 10.1.2. Failure to comply with other specifications and requirements contained herein.
 - 10.1.3. Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.
 - 10.1.4. Failure to remedy deficient performance upon request.
- 10.2. The following remedies shall be available to Agency upon default.
 - 10.2.1. Immediate cancellation of the Contract.
 - 10.2.2. Immediate cancellation of one or more release orders issued under this Contract.
 - 10.2.3. Any other remedies available in law or equity.

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11. MISCELLANEOUS:

11.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: . Arman Dhar
Telephone Number: . 925-640-3641 and 408-893-5500
Fax Number: . 408-503-0934
Email Address: . rfp@tryfacta.com

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Exhibit A - Pricing Page

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CRQM DOT26*44

Contract Item	Description	Est. Qty.	Unit of Measure	Year 1 Unit Cost	Year 2 Unit Cost	Year 3 Unit Cost	Year 4 Unit Cost	Extended Cost
4.1.1	Senior Mainframe Application Analyst	2080	EA	\$109.35	\$111.54	\$113.77	\$116.05	\$937,476.80
4.1.2	Mainframe Application Analyst	2080	EA	\$43.20	\$44.06	\$44.94	\$45.84	\$370,323.20
4.1.3	Senior Application Oracle Database Administrator	2080	EA	\$94.20	\$96.08	\$98.00	\$99.96	\$807,539.20
4.1.4	Application Oracle Database Administrator	2080	EA	\$87.40	\$89.15	\$90.93	\$92.75	\$749,278.40
4.1.5	Senior Application DB2 Database Administrator	2080	EA	\$96.50	\$98.43	\$100.40	\$102.41	\$827,299.20
4.1.6	Application DB2 Database Administrator	2080	EA	\$83.70	\$85.37	\$87.08	\$88.82	\$717,537.60
4.1.7	PC Programmer Analyst	2080	EA	\$37.60	\$38.35	\$39.12	\$39.90	\$322,337.60
4.1.8	Senior PC Programmer Analyst	2080	EA	\$84.30	\$85.99	\$87.71	\$89.46	\$722,716.80
4.1.9	Application SQL Server Database Administrator	2080	EA	\$82.10	\$83.74	\$85.41	\$87.12	\$703,809.60
4.1.10	Senior Application Oracle Database Administrator	2080	EA	\$95.40	\$97.31	\$99.26	\$101.25	\$817,897.60
4.1.11	GIS Database Administrator	2080	EA	\$42.70	\$43.55	\$44.42	\$45.31	\$366,038.40
4.1.12	Senior GIS Database Administrator	2080	EA	\$77.21	\$78.75	\$80.33	\$81.94	\$661,918.40
4.1.13	GIS Architect	2080	EA	\$114.75	\$117.05	\$119.39	\$121.78	\$983,777.60
4.1.14	GIS Application Developer	2080	EA	\$74.30	\$75.79	\$77.31	\$78.86	\$637,020.80
4.1.15	Senior GIS Application Developer	2080	EA	\$101.25	\$103.28	\$105.35	\$107.46	\$868,067.20
Grand Total								\$10,493,038.40