SYSTEMS PROGRAMMER 2

Nature of Work
 Under general supervision, performs work of considerable
difficulty to provide software support for major software systems
which affect the entire user agency. Installs and maintains
software systems such as RACF, MVS, and JES. Monitors
operations, debugs the system when problems arise, and controls
and updates the software packages which interface with
application programs of various users. Trains and consults with
lower level systems programmers on complex aspects of
installation of software systems and the compatibility with the
existing environment. Provides technical guidance to programmer
analysts in methods of interfacing application programs with the
operating systems and the database management on data
communication systems. Being on-call and irregular hours are
required of the position. Performs related work as required.

Distinguishing Characteristics
 Systems Programmer 2 performs complex technical and/or lead
work. Systems Programmer 2 provides support for major software
systems; errors in judgment at this level could bring down the
entire central mainframe system.

Examples of Work
 Installs, implements, tests and evaluates subsystem software
  package uses statewide; selects the correct parameters for
  systems operation and system modifications; tests system
  modifications which are provided by vendors, identifies and
  corrects errors.
 Provides technical expertise to lower level systems
 programmers in the installation and testing of vendor-supplied
system modifications, evaluating test results and resolving
problems of a very technical nature.
 Monitors computer performance to identify, correct and/or
 improve operational efficiency of the hardware/software
configuration.
 Supervises the evaluation and installation of software
 packages by other Systems Programmers, identifying and
correcting potential software problems in the vendor supplied
packages and/or modifications.
 Documents the availability of new software subsystems by
 writing information for the first-time users in lay terms and
for the highly technical users in technical terms.
 Recovers lost files or restores damaged files in the systems.
 Studies current technical literature to become familiar with
  new products.
 Attends demonstration meetings held by hardware/software
  vendors to evaluate new products.
 Adjusts systems software to improve function and performance.

SYSTEMS PROGRAMMER 2 (CONT'D)

Knowledge, Skills and Abilities
 Knowledge of two or more computer programming languages
 (COBOL, PL/1, assembler, etc.).
 Knowledge of the use and limitations of data processing
 equipment and of systems design techniques.
 Knowledge of the design, execution and operation of extremely
  complex system software such as operating systems, database
  management or database communications systems.
 Knowledge of programming languages and job control language
 used to create and modify host resident software packages.
 Knowledge of systems analysis techniques.
 Skill in the use of application programming languages, job
 control language, and host resident software packages.
 Skill in programming and system design.
 Skill in the generation, installation, and maintenance of
 resident software packages.
 Skill in the evaluation of systems and programs.
 Ability to solve data processing problems logically.
 Ability to read, understand, and use technical manuals.
 Ability to coordinate the efforts of the groups involved in
  installing or modifying hardware or software systems.
 Ability to evaluate technical proposals and to communicate
  effectively with user personnel and others on technical issues,
both orally and in writing.

Minimum Qualifications
 Training: Graduation from an accredited four-year college or
  university with twelve semester hours credit in computer
science.
 Substitution: Additional experience as a programmer/analyst or
systems programmer may substitute for the required   training on
a year-for-year basis. Only systems programming experience can
substitute for the twelve semester hours credit in Computer
Science.
 Experience: Four years of full-time or equivalent part- time
paid experience as a systems programmer.
 Substitution: A Certificate in Computer Programming (CCP) in
systems programming may substitute for one year of the required
systems' experience.

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