

COMPUTER SPECIALIST (SOFTWARE)

Duties and Responsibilities

This class of positions encompasses highly technical or supervisory responsibilities for the analysis, design, development, implementation, troubleshooting, enhancement, maintenance and security of software systems and applications performed at varying levels of difficulty and with varying degrees of latitude for independent initiative and judgment. There are four Assignment Levels within this class of positions differing according to the complexity and sophistication of the hardware and software systems and the amount of supervision required. The following are typical assignments within this class of positions. All personnel perform related work and when necessary, perform the duties of lower titles and Assignment Levels.

Assignment Level I

Under supervision, with considerable latitude for independent action or the exercise of independent judgment, is responsible for the analysis, design, development, implementation, enhancement, maintenance and security of database management systems, operating systems, data communications systems, applications, mobile applications, websites, and/or related software functions. Diagnoses problems and communicates technical issues to technical and non-technical audiences. Creates, maintains and implements source code and may participate in application analysis and testing. Prepares program specifications and diagrams, develops logic flowcharts and documents program development and revisions. May supervise a unit engaged in work related to the above areas or may independently perform related work of a highly complex, technical nature. In the temporary absence of the supervisor, may perform the duties of that position.

COMPUTER SPECIALIST (SOFTWARE) (continued)

Assignment Level II

Under general supervision, with wide latitude for the exercise of independent initiative and judgment, may supervise a unit engaged in systems development work of great difficulty, is responsible for the analysis, design, development, implementation, enhancement, maintenance and security of database management systems, operating systems, data communications systems, applications, mobile applications, websites, and/or related software functions. Serves as project leader performing complex staff work and the full range of computer systems analysis functions utilizing general software and software systems analysis in highly complex systems development projects; or supervises the activities of a number of applications programming units engaged in work of more than ordinary difficulty, complexity and responsibility in a multi-programming electronic computer installation. In the temporary absence of the supervisor, may perform the duties of that position.

Assignment Level III

Under general supervision, with broad scope for the exercise of independent initiative and judgment, is responsible for the analysis, design, development, implementation, enhancement, maintenance and security of database management systems, operating systems, data communications systems, applications, mobile applications, websites, and/or related software functions. Supervises the units responsible for systems development and applications programming, instructing, directing and checking the work of subordinates, or is routinely responsible for the coordination and direction of data processing projects organized to plan and implement complex integrated software development projects in a multi-programming computer system environment. In the temporary absence of the supervisor, may perform the duties of that position.

COMPUTER SPECIALIST (SOFTWARE) (continued)

Assignment Level IV (See Special Note Under Qualification Requirements)

Under minimum direction, with the broadest scope for the exercise of independent initiative and judgment, holds senior-level technical responsibility for extremely complex and ongoing software functions related to systems analysis, data administration, database management systems, operating systems, data communications systems, on-line applications, mobile applications, programming contingency planning, evaluation and selection of telecommunications, local area networks, computer hardware and software products, websites, and quality assurance functions. Routinely serves as in-house expert and authority in the aforementioned extremely complex and highly specialized areas. Coordinates multiple ongoing projects of extraordinary technical complexity, encompassing multiple areas of information processing technology. Directs major undertakings that run in a large multi-mainframe data center, and/or an environment of distributed processing systems combining numerous types of hardware and software. May supervise a unit or units engaged in work related to the aforementioned complex software functions. In the temporary absence of the supervisor, may perform the duties of that position.

Qualification Requirements

1. A baccalaureate degree from an accredited college, including or supplemented by 24 semester credits in computer science or a related computer field and two years of satisfactory full-time computer software experience in computer systems development and analysis, applications programming, database administration, maintenance and support, systems programming, data communications, mainframe development, mobile development, web development and design, including one year in a project leader capacity or as a major contributor on a complex project; or
2. A four-year high school diploma or its educational equivalent and six years of satisfactory full-time computer software experience as described in "1" above, including one year in a project leader capacity or as a major contributor on a complex project; or

COMPUTER SPECIALIST (SOFTWARE) (continued)

Qualification Requirements (continued)

3. Education and/or experience equivalent to "1" or "2" above. College education may be substituted for up to two years of the required experience in "2" above on the basis that 60 semester credits from an accredited college is equated to one year of experience. A masters degree in computer science or a related computer field, or a certificate of at least 625 hours in computer programming from an accredited technical school (post high school), may be substituted for one year of the required experience in "1" or "2" above. However, all candidates must have at least a four-year high school diploma or its educational equivalent and at least one year of satisfactory full-time experience in a project leader capacity or as a major contributor on a complex project.

Special Note

To be eligible for placement in Assignment Level IV, in addition to the Qualification Requirements stated above, individuals must have one additional year of satisfactory experience in a project leader capacity or as a major contributor on a complex project in data administration, database management systems, operating systems, data communications systems, capacity planning, and/or applications programming.

Direct Lines of Promotion

From: Computer Associate
(Software) (13631)

To: Computer Systems
Manager (M 10050)