

The Maryland National Capital Park and Planning Commission

Title: Information Systems Specialist II Grade: 24 Date: 12/8/2020
Series: Information Technology Code: 1325 EEO: Professional FLSA: Exempt

Class Definition:

Under direction, performs the full range of database design and development and information systems analysis work. Applies information systems analysis methods and techniques to design, develop, setup, maintain, repair and configure or customize computer applications on various hardware and software platforms (i.e., Geographic Information Systems – IS/GIS, Enterprise Account Management - EAM, Financial Systems, Document Management). Provides support to users by monitoring and resolving problems and meeting requests for hardware and software upgrades and enhancements; analyzes business processes and workflows to determine development requirements and creates documentation. Designs, develops, and administers databases using development software (i.e., Visual Studio) and systems administration tasks. Integrates various hardware and software platform products and data sources to accomplish a business process; and installs, tests and evaluates new systems. As an individual contributor, the majority of work is day-to-day maintenance and enhancements of applications and databases, with time spent on analysis and design. Incumbent takes initiative to plan and complete regularly scheduled maintenance and related work and to resolve problems encountered according to established policies and procedures; consults with a more experienced employee and supervisor on analysis and design efforts. Coordinates with stakeholders, users and vendors as appropriate to research problems, identify solutions and ensure efficient system administration. Applies considerable knowledge of principles, procedures and methods used in information systems and software development tools and concepts, methods and techniques used in developing applications. Independently performs various types of analyses and solves conventional, non-standard and challenging problems. Interacts with people inside and outside the organization to exchange information, coordinate, instruct, guide, advise and obtain agreement. Performs other duties, as assigned.

Work is assigned in terms of functions, priorities, requirements of specific assignments, known or suspected problems. The incumbent independently plans and carries out the work in conformance with these parameters, established policies, procedures and accepted practices of the field of work, and resolves commonly encountered problems by selecting and applying, or adapting and adjusting, the appropriate guides. Incumbent is expected to keep the supervisor informed and to seek assistance only for unusual matters. Work is expected to be effective - the incumbent is held responsible for results; work is evaluated in terms of quality, quantity, timeliness, teamwork, customer service and other factors.

Examples of Important Duties (Estimated Percentages):

1. Core Functions (±70%) – assigned functions vary by position
 - Software Administration. Plans and schedules backups, upgrades and other maintenance operations of Information Systems (IS) that ensure minimal impact on agency operations. Verifies execution of automated system processes and reports and resolves any issues that occur. Provides vulnerability patching as directed by software vendors. Resolves system hardware issues by working with staff and or hardware vendors. Customizes vendor systems as required to meet business practices using various systems administration tools.

The Maryland National Capital Park and Planning Commission

Title: Information Systems Specialist II Grade: 24 Date: 12/8/2020
Series: Information Technology Code: 1325 EEO: Professional FLSA: Exempt

- Software Development. Conducts analysis of business processes, work flows, requirements and data management problems to define or re-engineer automation needs; analyzes available resources. Meets with users to identify work requirements and processes; obtains knowledge of working environment, available resources and equipment, skill and knowledge level. Designs, develops, tests and evaluates applications software and systems using standard methodology and practices including the current technology industry standards for programming languages and tools; develops and executes a plan for the design, delivery and implementation of the system including training requirements. Prepares test data and tests programs to determine if specified requirements are met; modifies software until requirements are met. Prepares documentation to include file relations, system operational assumptions, data flows, access and security, maintenance procedures and user documentation.
- Database Administration and Development. Manages one or more databases and sets of related applications. Under the supervision of more senior staff, performs tasks such as, database design, implementation, maintenance, application scripting, modeling, data processing, adding users, loading information and modifying database structure. Maintains a complete log of database backup and archive procedures, tasks, contacts, problems and resolutions; automates data workflows between disparate systems. Monitors operations and recommends upgrading, enhancing, or re-engineering procedures, or software; ensures data integrity. Develops reporting routines and coordinates review among data owners. Evaluates and recommends upgrades and enhancements to applications; prepares reports documenting work activity and projected activities and needs. Tests all changes written in-house or by a software vendor. Generates database reports and performs analysis and integration/enhancement of databases.

2. Other (±30%)

- Maintains familiarity with current industry methods, software and technology, including reading trade journals, participation in regional user groups, conferences and technical online forums. Regularly identifies self-development and training opportunities; takes initiative to identify needed information and obtain appropriate resources. Maintains knowledge and skills.
- Operates computers and peripheral equipment with office automation suite software (e.g. word processing, spreadsheets, graphics, statistical, database packages) to enter data, perform data analysis, design and produce reports, tables, graphs, and charts. Establishes Internet and Intranet access and HTML addresses; researches potential applications and advises staff. Designs WEB pages and coordinates upgrades and revisions.

The Maryland National Capital Park and Planning Commission

Title: Information Systems Specialist II Grade: 24 Date: 12/8/2020
Series: Information Technology Code: 1325 EEO: Professional FLSA: Exempt

- Provides support to users; resolves problems. Responds to requests for data, customized reports, enhancements and software upgrades; identifies, diagnoses and resolves technical issues. Works with software vendors to resolve technical problems; follows established industry and organizational standards for quality control to ensure accuracy and completeness of work performed; provides training to staff, end users and division team staff. Establishes, maintains or enhances working relationships with internal and external contacts.
- Trains and provides informal guidance to less experienced technical staff.

Important Worker Characteristics:

- A. (1) Considerable knowledge of, and skill in applying (a) the principles, procedures, and methods used in information systems, functional and data analysis, design, development, implementation, testing, evaluation and maintenance; (b) software development tools and concepts, methods and techniques used in developing computer applications, including programming languages (i.e., SQL and PLSQL) and report generators; (c) reporting and analysis; (d) networking, web services, proxy architecture and database constructs (i.e., Microsoft .NET programming*, JavaScript/HTML); (e) uses and capabilities of computer hardware and software; (f) system analysis and project management methods and principles; and (g) state and local government application procedures*.
- (2) Knowledge of Commission organization, policies and procedures*.

**Typically acquired or fully developed primarily after employment in this job class.*

- B. Considerable skill and ability in:
- Writing and modifying software applications using industry standard languages;
 - Utilizing database diagnostics and tuning;
 - Collecting, analyzing, organizing, and documenting information concerning the automation of work processes;
 - Working with various operating systems on the mini, microcomputer, and client and server platforms;
 - Use of spreadsheets, word processing, graphics, communications, database management systems and integration of data between diverse systems;
 - Monitoring log files and understanding errors to report or correct;
 - Writing programs in SQL, PL/SQL and EAM, if applicable and script languages to extract or modify data in database.
 - Working with multiple and varied operating systems;
 - Mining data and performing quality control checks;
 - Developing detailed system specifications and documentation for desktop and web applications;
 - Designing, creating and maintaining websites (i.e., Smartlink Systems) and software;
 - Developing, administering and delivering systems training.

The Maryland National Capital Park and Planning Commission

Title: Information Systems Specialist II Grade: 24 Date: 12/8/2020
Series: Information Technology Code: 1325 EEO: Professional FLSA: Exempt

- C. Skill in problem solving to select, organize and logically process relevant information (verbal, numerical or abstract) to solve a problem. Examples include analyzing and correcting complex system and application problems; analyze user requirements and translate into system solutions.
- D. Skill in communication to understand verbal and written information (including facts, assertions and arguments), draw inferences, form hypotheses and develop logical arguments, and to express such information so that others will understand and comply. This includes skills in actively listening to ascertain key information, including concerns, wants and needs of others, and in coordinating to obtain desired results including agreement or compliance. Examples include reading, writing, interpreting, and applying technical instructions and documentation.
- E. Interpersonal skills to interact with business contacts in a businesslike, customer service-oriented manner; this includes skill in establishing and maintaining effective working relationships and working as a member of a team.
- F. Skill in using a computer, modern office suite software (such as MS Office), enterprise software and specialized software.

Minimum Qualifications (MQs):

1. Bachelor's Degree in Information Systems, Computer Science, Geographic Information Systems or any related field.
2. Two (2) years of experience in applications support and development.
3. An equivalent combination of education and experience may be substituted, which together total six (6) years.
4. Depending upon area of assignment, a valid driver's license in accordance with both State and Commission rules and regulations. Driver's license must be unencumbered by restrictions, revocations, suspensions, or points that could limit the employee's ability to drive Commission vehicles or perform driving duties required by the position of assignment.

Working Conditions:

Work is usually performed in an office setting. Works in an environment with high volume and moderate pressure to meet deadlines. Work must be performed accurately and may require occasional overtime, after-hours, weekend or on-call work.