SENIOR SYSTEMS ANALYST/PROGRAMMER

DEFINITION

Under general direction, performs complex analysis, design, coding, testing, and documentation of computer applications for administrative and student systems related to application upgrades, new programming projects, and application enhancements; provides technical support of administrative and student systems applications.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned managerial personnel. Exercises no supervision of staff.

CLASS CHARACTERISTICS

This is an advanced journey-level professional classification responsible for defining, developing, and implementing new software systems and major enhancements to highly complex existing software systems. This classification exercises considerable independent judgment and initiative and collaborates with users and other technical staff through the lifecycle of assigned development projects. This class is distinguished from the Programmer/Analyst by the advanced technical work and the provision of technical instruction to lower-level staff. This class is further distinguished from the assigned managerial personnel by the latter's full management responsibility in planning, organizing, and overseeing all programming and development functions and activities.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only)

1. Provides technical support, analysis, and programming to ensure complete and appropriate use of the District's administrative and student systems.
2. Reviews user needs and requests and develops proposed solutions for system enhancements; participates in the development of and ensures adherence to project schedules.
3. Confers with clients to develop program specifications for requirements not met by current systems; obtains information related to needs, objectives, functions, features, and input/output requirements; defines and documents requirements for data, workflow, logical processes, hardware and operating system environment, interfaces with other systems, internal and external checks and controls, and outputs.
4. Designs, develops, and implements application enhancements while ensuring adherence to standards and procedures for system development, database access, web-based development, change control, and reporting.
5. Assists in developing software and systems to optimize performance of relational database systems, application access, and enhance and support of web applications accessing relational databases.

6. Designs, develops, tests, refines, and implements software that supplements or integrates with system applications; customizes and maintains system objects as required.
7. Writes or modifies documentation describing program development, logic, coding, testing, changes and corrections, and installation and operating procedures.
8. Provides technical assistance by responding to inquiries regarding errors, problems, or questions about programs.
9. Trains users or technical support staff to use programs.
10. Learns and applies emerging technologies and, as necessary, to perform duties in an efficient, organized, and timely manner.
11. Promotes an environment of belonging as it relates to diversity, equity, inclusion, social justice, anti-racism, and accessibility.
12. Provides quality customer service when interacting with the public, vendors, students, and College staff, including individuals from minoritized groups.
13. Supports and abides by federal, state, local policies, and Board Policies and Administrative Procedures.
14. Participates on committees, task forces, and special assignments, including, but not limited to Screening and Selection Committees and mandated trainings as required.
15. Prepares and delivers oral presentations related to assigned areas as required.
16. Performs other related duties as assigned.

QUALIFICATIONS

Knowledge of:

1. Principles and practices of supporting a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
2. State-of-the-art information systems as applied to large, complex administrative or educational organizational environments.
3. Principles and techniques of computer systems and software architectures.
4. OS-based platforms, including UNIX and AIX.
5. Programming languages, including but not limited to Pro*C, JavaScript, Oracle Forms, Shell Scripting, and PL/SQL.
6. Data warehousing, data modeling, ETL techniques, and Oracle Warehouse Builder.
7. Computer languages used for business and campus applications.
8. Procedures of analysis and design, system development, and computer programming.
9. Use, capability, characteristics, and limitations of computer systems and databases.
10. Principles and procedures of record keeping.
11. Modern office practices, methods, and computer equipment and applications related to the work, including word processing, database, and spreadsheet software.
12. English usage, spelling, vocabulary, grammar, and punctuation.
13. Techniques for providing a high level of customer service by effectively dealing with the public, vendors, students, and District staff, including individuals of various ages, various socio-economic and ethnic groups.

Skills & Abilities to:

1. Advocate for and communicate the College's vision and commitment to creating a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
2. Participate in addressing gaps in diversity, equity, inclusion, social justice, anti-racism, and accessibility in the recruitment and retention of staff.
3. Participate in providing resources and support towards the goal of a diverse, equitable, inclusive, socially just, anti-racist, and accessible academic and work environment.
4. Analyze informational requirements and needs, identify problems, provide technical advice and consultation and ensure efficient computer system utilization.
5. Analyze data and develop logical solutions to problems.
6. Perform programming in Pro*C, JavaScript, PL/SQL, and a variety of other languages.
7. Organize and prioritize a variety of projects and multiple tasks in an effective and timely manner; organize own work, set priorities, and meet critical time deadlines.
8. Use English effectively to communicate in person, over the telephone, and in writing.
9. Understand scope of authority in making independent decisions.
10. Review situations accurately and determine appropriate course of action using judgment according to established policies and procedures.
11. Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

Education and Experience:
Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:

1. Equivalent to graduation from a regionally accredited four-year college or university with major coursework in computer science, management information systems, or a related field; and
2. Four (4) years of experience in a large production environment, including two (2) years of experience in AIX and/or Linux/UNIX operating environment, or similar environment.

Master's degree in Computer Science or directly related field will qualify incumbents for an increased pay grade.

Master's degree in Business Administration (with a related emphasis) will qualify incumbents for an increased pay grade.

Desirable Qualifications:

1. Experience working with policies and procedures relating to diversity, equity, inclusion, social justice, anti-racism, and accessibility preferably in a minority serving institution such as Hispanic Serving Institution (HSI) and Asian American and Native American Pacific Islander-Serving Institution (AANAPISI); OR
2. Experience with participation in programs relating to diversity, equity, inclusion, social justice, anti-racism, and accessibility preferably in a minority serving institution such as Hispanic Serving Institution (HSI) and Asian American and Native American Pacific Islander-Serving Institution (AANAPISI).

Licenses and Certifications:

The incumbent may periodically be required to travel to a variety of locations. If operating a vehicle, employees must have the ability to secure and maintain a valid California driver's license.

PHYSICAL DEMANDS

Must possess mobility to work in a standard office setting and use standard office equipment, including a computer; to operate a motor vehicle to visit various District and meeting sites; vision to read printed materials and a computer screen; and hearing and speech to communicate in person, before groups, and over the telephone. This is primarily a sedentary office classification although standing and walking between work areas may be required. Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment. Incumbents in this classification occasionally bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information. Employees must possess the ability to lift, carry, push, and pull materials and objects up to 20 pounds.

ENVIRONMENTAL ELEMENTS

Employees work in an office environment with moderate noise levels, controlled temperature conditions, and no direct exposure to hazardous physical substances. Employees may interact with staff and/or the public in interpreting and enforcing departmental policies and procedures.

Amended: 8/2018; 9/2018; 10/2018; 7/2023