



SYSTEMS AND NETWORK PROGRAMMER, SENIOR

SALARY GRADE: [C1-72](#)

DEFINITION:

Under the direction of an assigned supervisor, serve as a project leader. Applies advanced skill and knowledge of complex network protocols and knowledge of multiple operating systems in gathering, analyzing, synthesizing, planning and designing unique and original solutions for integrating networks and/or updating existing and new systems.

DISTINGUISHING CHARACTERISTICS:

The Systems & Network Programmer I maintains systems and/or network configurations, and troubleshoots and diagnose routine systems problems. In addition to the types of duties performed by the Systems & Network Programmer I, the Systems & Network Programmer II develops systems and/ or network configurations and run diagnostics to forecast performance thresholds. The Senior Systems & Network Programmer applies advanced skill and knowledge of complex network protocols and knowledge of multiple operating systems in gathering, analyzing, synthesizing, planning and designing unique and original solutions for integrating networks and/or updating existing and new systems. Serves as project leader.

EXAMPLE OF DUTIES AND RESPONSIBILITIES:

Depending upon assignment, duties may include, but are not limited to, the following:

1. Regularly evaluate new and emerging technology and apply to innovative network solutions in the context of institutional needs.
2. Resolve the most complex network problems.
3. Evaluate complex network performance analysis and recommend appropriate action to supervisor.
4. Act as technical liaison for network product or system vendors.
5. Install, support, maintain and program databases or networks for the District as assigned.
6. Research and perform analysis to identify system expansions to meet anticipated future requirements.
7. Install, configure and maintain network software including network monitoring and security software.
8. Install, configure and maintain software for routers, bridges, switches and other network devices.
9. Develop original solutions for inter/intra operability network maintenance and support results in the creation of policies and procedures to ensure ongoing continuity.
10. Communicate with outside organizations regarding computer maintenance, materials and product capabilities.
11. Compare multiple database systems and present recommendations to supervisor.
12. Research and recommend new architecture of applications for maximum technical advantage.
13. Perform related duties as assigned.

EMPLOYMENT STANDARDS:

Knowledge of:

1. Advanced knowledge of computer hardware systems, software applications and languages utilized by the District.
2. Advanced knowledge of the principles, practices and techniques of data base structures and computer programming.
3. Technical aspects of field of specialty and working knowledge of related specialties.
4. Record-keeping techniques.
5. Oral and written communication skills.
6. Interpersonal skills using tact, patience and courtesy.

Ability to:

1. Demonstrate understanding of, sensitivity to, and respect for the diverse academic, socio-economic, ethnic, religious, and cultural backgrounds, disability, and sexual orientation of community college students, faculty and staff.
2. Apply independent technical judgment to complex technical situations.
3. Coordinate schedules and resources with systems and network programmers and users.
4. Apply extensive application of knowledge in integrating network protocols to complex solutions and understanding relationships between applications.
5. Perform duties to assure proper operations of the computer systems for the District including UNIX and VMS computers to provide resources for the staff, faculty and students.
6. Operate computers and peripheral equipment properly and efficiently.
7. Diagnose and understand reasons for system failures.
8. Maintain current knowledge of technological advances in the field.
9. Communicate effectively both orally and in writing.
10. Maintain records and prepare reports.
11. Prioritize and schedule work.
12. Analyze situations accurately and adopt an effective course of action.
13. Work independently with little direction and provide work directions to others.
14. Establish and maintain cooperative and effective working relationships with others.

Education and Experience

Any combination equivalent to:

1. Bachelor's degree in computer science or related field .
2. Five (5) years experience in computer programming, computer systems and network development responsibilities.

WORKING CONDITIONS:

Environment:

1. Office environment.

Physical Abilities:

1. Hearing and speaking to exchange information in person and on the telephone.
2. Dexterity of hands and fingers to operate computer keyboard.
3. Seeing to read various materials.
4. Standing for extended periods of time.
5. Reaching overhead, above the shoulders and horizontally.
6. Bending at the waist, kneeling or crouching.
7. Lifting, carrying, pushing or pulling heavy objects up to 30 lbs.

Hazards:

1. Extended viewing of computer monitor.