

NETWORK ENGINEER

DISTINGUISHING FEATURES OF THE CLASS: This is a technical position responsible for assisting with the design, maintenance, and support of voice, video and data systems. The work involves evaluating county needs, providing recommendations regarding technical specifications for network upgrades and expansions, and performing specialized, complex networking assignments. The employee reports directly to and works under the general supervision of the Assistant Director of IT for Infrastructure Services. Does related work as required. Does related work as required.

TYPICAL WORK ACTIVITIES:

Assists with the design, development, maintenance, and support of voice and data network for network upgrades and expansions in accordance with county objectives;

Works on specialized, complex assignments relating to the installation and relocation of hardware and software for network equipment, including assembly, configuration and transport, in accordance with established procedures and instructions;

Administers, configures and manages tools and applications that operate on a "enterprise" level, affecting county-wide operations;

Performs periodic preventative maintenance in accordance with manufacturer recommendations and departmental and county standards;

Develops and maintains system design documentation and related materials;

Reviews analyses and technical feasibility to inform voice and data network deployment strategies;

Assesses and reviews voice and data network growth forecasts and ensures that county needs are translated into network capacity requirements;

Implements best security practices for networking and telecommunications in accordance with county policies;

Responds to maintenance service requests related to network equipment;

Responds to events and incidents regarding network-related problems, performs diagnosis of failures to determine whether they are induced by network software or hardware, and performs the appropriate action to resolve the problem;

May perform other incidental tasks, as required.

FULL PERFORMANCE KNOWLEDGES, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of LAN and WAN network systems including those used for voice, video and data systems;

Good knowledge of wireless local and wide area network administration;

Good knowledge of the components, operation, maintenance and repair of network equipment;

Good knowledge of data communications and basic electronics terminology;

Good knowledge of standard communications protocols;

Ability to plan, organize, coordinate, administer and evaluate the effectiveness of program plans and provision of services related to voice, video and data systems;

Ability to design, install, update and maintain LAN and WAN networks including those used for voice, video and data systems;

Ability to establish and maintain effective working relationships;

Ability to train others in the configuration, operation, and configuration of voice, video and data systems;

Ability to design, engineer, and implement voice, video and data systems;

Ability to analyze voice, video and data system problems with the ability to recommend and implement workable solutions;

Ability to communicate effectively both orally and in writing;

Organizational skills.

MINIMUM QUALIFICATIONS:

- A) Possession of a Bachelor's degree in network administration, telecommunication engineering, computer science, computer technology, data processing, management information systems, information resource management, or related field, and two (2) years experience in the installation of microcomputer hardware and software and the configuration and administration of local and wide area networks, including the design and engineering of Local Area/Wide Area Networks (LAN/WAN), telecommunication systems, telephone systems, audio/visual systems, and/or server, storage and/or telephony; OR

- B) Possession of an Associate's degree in network administration, telecommunication engineering computer science, computer technology, data processing, management

information systems, information resource management, or related field, AND four (4) years experience involving the installation of micro-computer hardware and software and the configuration and administration of local and wide area networks, two (2) years of which must have included the design and engineering of Local Area/Wide Area Networks (LAN/WAN), telecommunication systems, telephone systems, audio/visual/video systems, and/or server, storage and/or telephony; OR

- C) Possession of a current industry-recognized certification in networking and/or telephony (such as CISCO CCNA, Cisco CCNP, CompTIA Network+, Aruba CANS, NCIA, Fortinet FCP, or equivalent) and four (4) years experience involving the installation of micro-computer hardware and software and the configuration and administration of local and wide area networks, two (2) years of which must have included the design and engineering of Local Area/Wide Area Networks (LAN/WAN), telecommunication systems, telephone systems, audio/visual/video systems, and/or server, storage and/or telephony;
- D) Six (6) years of experience involving the installation of network and/or telephony hardware and software and the configuration and administration of local and wide area networks, two (2) years of which must have included the design and engineering of Local Area/Wide Area Networks (LAN/WAN), telecommunication systems, telephone systems, audio/visual/video systems, and/or server, storage or workstation management; OR
- E) An equivalent combination of training and experience as defined by the limits of A), B), and C) above.

NOTE: Your degree must have been awarded by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of education. If your degree was awarded by an educational institution outside of the United States and its territories, you must provide independent verification of equivalency. A list of acceptable companies who provide this service can be found on the internet at <https://www.cs.ny.gov/jobseeker/degrees.cfm>. You must pay the required evaluation fee.

SPECIAL REQUIREMENT: Possession of a valid license to operate a motor vehicle in the State of New York will be required at time of appointment and maintain same while in the title.

"BACKGROUND INVESTIGATION AND ADDITIONAL SCREENINGS: Each candidate is subject to a thorough background investigation to comply with requirements related to security, data types and supported systems. A conviction at any time may bar appointment to this position, result in termination and/or require additional screening at the discretion of the employer."

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COMPETITIVE