E911 SYSTEMS ADMINISTRATOR Tompkins County

Classification: Competitive Labor Grade: 0 Approved: 0

MINIMUM QUALIFICATIONS:

(a) Graduation from a regionally accredited or New York State registered four year college with a Bachelors Degree in Computer Science, Math, Engineering or Electrical Technology **AND** six years full-time paid (or the equivalent part-time and/or volunteer) experience as a computer programmer, electronics technician or in any dispatching situation that would have provided a first-hand opportunity for direct hands-on learning of the various emergency services hardware and software systems; **OR**

(b) Graduation from a regionally accredited or New York State registered two year college with an Associates Degree in Computer Science, Math, Engineering or Electrical Technology **AND** eight years of full-time paid (or the equivalent part-time and/or volunteer) experience as a computer programmer electronics technician or in any dispatching situation that would have provided a first-hand opportunity for direct hands-on learning of the various emergency services hardware and software systems; **OR**

(c) Graduation form High School or possession of a high school equivalency diploma **AND** ten years of full-time (or the equivalent part-time and/or volunteer)experience as a computer programmer, electronics technician or in any dispatching situation that would have provided a first-hand opportunity for direct hands-on learning of the various emergency services hardware and software systems; **OR**

(d) Any equivalent combination of training and experience as described in (a), (b), and (c) above

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

DISTINGUISHING FEATURES OF THE CLASS:

This is a technical and administrative position responsible for installing, integrating, networking, troubleshooting, and repairing, the various pieces of hardware and software necessary to enable Tompkins County's E-911 and Computer Aided Dispatch (CAD) telecommunications systems. These systems include the CAD system itself, CAD workstations, AS/400's, the Gateways and the interfaces to the gateways including but not limited to; NYSPIN, Dialer Alarms, Radio Alarms, Mobile Data Terminals, Unit Status, Remote Printers, Net Clock and E-911. The duties may be performed independently or in consultation with vendors, technical support personnel, department heads and inter-municipal representatives as necessary. The work includes the study of a variety of problems, the various sources and flow of information, adaptation of software to facilitate computer input and the information output. An E-911 Systems Administrator is also required to keep abreast of the dispatching field. The incumbent will serve as a dispatcher on an as-needed basis and will be responsible for providing system training to current and new employees. Considerable leeway is allowed for the exercise of independent judgment when planning and implementing of work methods and procedures with commensurate responsibility for technical results. An incumbent in this title may supervise other employees on an occasional basis but supervision is not a normal requirement of this position. The work is performed under the general direction of the County Fire and Disaster Coordinator with wide leeway allowed for the exercise of independent judgment. Due to the critical nature of the E-911 system, an employee in this class is required to be on-call 24/7. The incumbent will be required to perform any and all related duties as necessary.

TYPICAL WORK ACTIVITIES:

- Performs a variety of programming tasks to develop, modify or maintain applications;
- Performs a variety of personal computer programming, hardware installation, configuration and training;
- Supervises and coordinates all work involving telecommunications, networking, and system integration for the inter-municipal E-911 system;
- Researches hardware and software needs, and advocate for the purchase of appropriate technology;

- Establishes standards for networking, hosts and servers, and application construction, and advocate for adoption of such standards;
- Establishes procedures for all networking, computer, and telecommunications functions and assists the department head in the enforcement of such procedures;
- Administers a local area network;
- Recommends and provides quality control for computer, telephone and network systems based on an in-depth requirement analysis;
- Provides for on-going short and long range technical planning for telecommunications and networking systems;
- Coordinates, evaluates, tests and supervises the installation of delivered materials;
- Insures customer satisfaction, provides feedback to customers on status of requests and follow-up with customers to provide increasing standards of service;
- Administer core processing platforms;
- Advise and consult on Network/Server/Application Design;
- Prepares, evaluates and recommends changes in procurement documentation in conjunction with department head, and other affiliates;
- Assures vendor compliance with contract specifications;
- Performs configuration, installation, troubleshooting and training on the network;
- Assures coordination and compatibility of hardware/software systems and performs necessary stages of research and maintenance;
- Researches rapidly changing technology using trade journals and other forms of media to provide suggestions and input for future needs;
- Collects information from relevant departments requesting computer support to determine current operations and analyze requirements;
- Designs or redesigns detailed software systems, using context diagrams, entity relationship models, information flows, and program flow charts as required to document user requirements and systems architecture;
- Specifies and/or Develops appropriate tests to assure system reliability and implements all programs in a test environment for parallel operation with current system;
- Debugs new and modified programs to assure compliance with predetermined requirements;
- Recognizes and points out the constraints of particular system programs, determines the impact of the application on computer resources, and decides what additional resources may be needed;
- Assists the user in the acceptance test and implements and monitors security of on-line programs and sensitive files;

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Thorough knowledge of computer aided dispatch and related hardware/software including but not limited to NYSPIN system and terminals, Dialer Alarms, Radio Alarms, mobile data terminals, Unit Status, remote printers, Net Clock and the E-911 system itself;
- Thorough knowledge of a variety of hardware relating to networks, including routers, hubs and other similar hardware, personal computers, printers and other peripherals;
- Thorough knowledge of a wide variety of computer software, including MS-DOS, the MS Windows Environment, the IBM OS/2 system, the NYSPIN system, and E-911;
- Thorough knowledge of emergency dispatch systems;
- Thorough knowledge of applicable laws, rules and regulations governing the use of software, as well as the judicial and administrative interpretation related to these;
- Good knowledge of the principles and practices of computer programming and the capabilities and use of a wide variety of data processing equipment;
- Good knowledge of the principles and practices of systems analysis as applied to computer programming;
- Skill in the operation of computer, communications and telecommunications equipment;
- Ability to learn and implement new technology;
- Ability to understand and develop logic flow charts and code programs from them;
- Ability to establish and maintain effective working relationships with department heads, computer users, software contractors, and inter-municipal users requesting service;
- Analytical reasoning ability;
- Initiative, resourcefulness, dependability, and good judgment are required.
- The employee's physical condition shall be commensurate with the demands of the position.