MINIMUM QUALIFICATIONS:

(a) Graduation from a regionally accredited or New York State registered College or University with a Master’s Degree or higher in computer science or a closely related Science, Technology, Education and Mathematics (STEM) discipline, AND two years of full-time paid (or the equivalent part-time and/or volunteer) computing system management experience with emphasis on software configuration/programming; OR

(b) Graduation from a regionally accredited or New York State registered College or University with a Bachelor’s Degree in computer science or a closely related STEM discipline, AND four years of full-time paid (or the equivalent part-time and/or volunteer) computing system management experience with emphasis on software configuration/programming; OR

(c) Graduation from a regionally accredited or New York State registered College or University with an Associate’s Degree in computer science or closely related STEM discipline, AND eight years of full-time (or the equivalent part-time and/or volunteer) computing system management experience with emphasis on software configuration/programming; OR

(d) Graduation from High School or possession of a high school equivalency diploma, AND ten years of full-time (or the equivalent part-time and/or volunteer) computing system management experience with emphasis on software configuration/programming;

(e) Any combination of training and experience equal to or greater than that described in (a), (b), (c), and (d) above, as determined by the Commissioner of Human Resources in consultation with the Director of Information Technology Services.

DISTINGUISHING FEATURES OF THE CLASS:

This is an administrative and technical position with responsibility for the direction, coordination, and project management of work involving computer and communication systems, software applications, database management, system integrations, and maintenance of related hardware and software. The work includes the study of various problems, different kinds of information sources, flow of information, adaptation of information for computer use and the information output. Tompkins County information and communication systems are configured to support numerous County departments and external organizations including local, State and Federal agencies. An employee in this class is responsible for effective communication, coordination, implementation and training related to Tompkins County computing and communication systems, and related policies and procedures. Considerable interpersonal skills are needed to teach, instruct, advise, plan and coordinate. This position works under the general direction of the Director of Information Technology Services, or the Deputy Director of Information Technology Services, with considerable leeway for planning work methods and procedures with commensurate responsibility for technical results. This position requires a high degree of autonomy and the ability to make daily independent judgments to ensure that systems are fully operational. Work is performed in consultation with other department heads and inter-municipal representatives. Supervision of others may be a function of this position. The incumbent will perform other related duties as required.

TYPICAL WORK ACTIVITIES:

• Acts as Project Leader and/or Supervisor to direct and coordinate the activities of staff for work involving computers, networking, software and the integration of various information and communication systems including installation and maintenance of related hardware and software for County departments, as well as inter-municipal/inter-agency endeavors;
• Provide software support for numerous County information and communication systems and acts as liaison between
departments, government agencies, and vendors;
• Facilitates information and communication system discussions between County Departments, local agencies, and/or
elected officials and provides program analysis and reports to appropriate County Legislative Committees;
• Establishes technology standards, procedures and policies related to the implementation and use of hardware, software,
and collaborative data sharing functions;
• Analyze the flow and integration of information and data between various systems, make recommendations on solutions
to improve efficiency and accuracy and develop or configure software programs to automate steps in processes and work
flows resulting in greater efficiency and fewer errors;
• Collect relevant information from departments and other agencies requesting computer support to determine current
operations and analyze requirements, and by doing so develop solutions that will streamline processes and create single
or enterprise solutions that can be potentially implemented within a shared-services model;
• Recognize and provide documentation to departments and agencies the constraints of particular system programs, and
determine impact of possible solutions on computer resources and ITS services;
• Develop and review information and communication system technical requirements, bids, RFIs, and RFPs, along with
related coordination and supervision of presentation, evaluation, and testing. This position will also manage the
installation and implementation of delivered solutions once a decision has been made on specific systems;
• Assist departments in drafting and negotiating computer/software contracts for equipment, systems, and professional
services;
• Assures vendor compliance with contract specifications and long term system support and maintenance agreements;
• Develop, configure, design or redesign detailed software systems, using context diagrams, entity relationship models,
information flows, and program flow charts as required to document user requirements and systems architecture;
• Perform a variety of programming and software configuration tasks to develop, modify, maintain, and document a
variety of applications (including, but not limited to, financial, human resources, permitting, time logging, records
management/retention, and other applications);
• Troubleshoot new and modify information and communication systems to assure compliance with predetermined
requirements;
• Assist the user in the acceptance test and implementation and monitor security of information and communication
systems, and sensitive information;
• Develop, communicate, and distribute policies and best practice documentation for systems usage and data of
administered programs for County personnel and external agencies;
• Train and coordinate personnel across County government and other agencies in the use of, and policies related to
information and communication systems and devices;
• Receive, evaluate, prioritize, schedule work, and take action on customer requests for repair, installation or modification
of information and communication systems and the configuration thereof;
• Communicates with dissatisfied customers to better implement future requests and solve immediate problems; and
• Research rapidly changing technology using trade journals and other forms of media to provide recommendations and
input for future anticipated needs.

**KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

• Thorough knowledge of operations of computing equipment, related peripherals, and information and communication
systems;
• Thorough knowledge of modern methods of systems analysis and testing;
• Thorough knowledge of applicable laws, rules and regulations governing the use of software and public data, as well as
the judicial and administrative interpretation related to these
• Good knowledge of remote access to a Windows environment and related systems over local area networks;
• Ability to understand and develop logical flow charts and configure systems for these flows;
• Ability to learn new technology and software programs;
• Ability to instruct others in the operations of software programs;
• Ability to establish and maintain effective working relationships with department heads, external agencies, elected
officials, computer users, software vendors, affiliates, and members of the public requesting computer services;
• Ability to prepare oral and written reports;
• Ability to plan and coordinate projects and the activities of project teams;
• Ability to plan and supervise the work of others;
• Analytical reasoning ability;
• Good judgment, integrity and tact; and
• The employee’s physical and mental condition shall be commensurate with the demands of the position, either with or
without reasonable accommodation.
• Regular and reliable full-time attendance, as scheduled and assigned (including on-call), shall be a requirement of this position.

PHYSICAL, MENTAL AND ENVIRONMENTAL DEMANDS:

Physical

The employee must be able to sit for extended periods of time within a standard eight-hour work day. Other types of physical effort are minimal with the exception of the occasional requirement to lift boxes of office supplies and paper goods up to twenty pounds. The incumbent’s visual acuity must be sufficient to enable him or her to see and accurately work with information on a computer screen for the majority of a working day. As a result, the job requires an extreme level of visual effort. The employee’s hearing must be sufficiently acute to enable him or her to hear, understand and carry out verbal instructions. The employee must have the physical ability to manipulate a computer keyboard and other types of office equipment requiring moderate precision, manual dexterity, and operating knowledge/skill. These fine motor skills include adequate hand/eye coordination and the full use of fingers, hands and arms to perform the essential functions of this job. This position requires the employee to network and operate computer hardware and manipulate software requiring a high degree of accuracy, precision, manual dexterity and operating knowledge and skill.

Mental

The psychological demands of this position are considerable consisting mainly of extremely tight deadlines, rush orders, unpredictable fluctuations in work volume, frequent interruptions, constant changes in work priority and regular exposure to crisis, rush orders and/or conflicting deadlines.

Environmental

The risk of injury or environment illness is minimal. Environmental factors include the ability to work closely and cooperatively in close physical proximity with others. He or she may occasionally be required to work alone. Almost all work is performed indoors in a temperature-controlled environment, so excessive heat, cold, humidity, noise, etc., are not factors that are significant to this job.

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