SYSTEMS PROGRAMMER II

DISTINGUISHING FEATURES OF THE CLASS: This is a high level technical position responsible for generating and maintaining the operating systems, programs, systems design and other software required by a computer system and its user agencies. The work involves the investigation of new computer industry developments, such as software alternatives, systems productivity tools, design methodologies, documentation approaches and programming efficiency, and the preparation of recommendations for present and future departmental requirements. The position is distinguished from Systems Programmer I by the supervision received and the complexity of assignments. Work is performed under the general supervision of the Director of Computer Services. Supervision may be exercised over technical employees involved in systems programming. Does related work as required.

TYPICAL WORK ACTIVITIES:

Evaluates operating systems releases, upgrades, makes recommendations, installs and maintains the software;

Develops and prepares operator instructions and documentation relating to the system programs;

Acts as debugging expert for the computer center;

Reviews new technical developments for applicability to operating systems and system software;

Advises Programmers and Operators on system functions, determines optimum equipment configuration, and selects standards routines; Confers with administrative supervisor on program ideas to improve production output;

Works with operations staff to determine and recommend to the Director increased hardware capabilities;

Conducts both short and long-term hardware/software planning studies for installation;

Evaluates and prepares communications regarding computer hardware and software specifications;

Monitors, authorizes and controls the computer center's access methods to data bases and the teleprocessing network;

Oversees the establishment, implementation and monitoring of procedures for data bases recovery and security;

Anticipates future requirements of applications and reviews new technical developments for application to current operating systems and system software;

FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

Thorough knowledge of the current principles, practices, methods, capabilities and techniques of high-speed electronic data processing including hardware, software and teleprocessing;

Thorough knowledge of the current principles, practices and methodologies of computer operating systems and their respective implementations;

Thorough knowledge of business concepts;

Thorough knowledge of the concepts, facilities, and internals of
    subsystems, utility programs and programming languages;
Thorough knowledge of network architecture, capacity planning and
    performance monitoring;
Good knowledge of new developments in the computer industry which
    may be applicable for institution in the department;
Good knowledge of the principles and practices of systems analysis
    and statistical analysis;
Ability to communicate effectively, both orally and in writing;
Ability to learn new computer languages;
Ability to utilize a computer system to its fullest capacity;
Ability to supervise subordinates in a manner conducive to full
    performance and high morale;
Tact;
Courtesy.

MINIMUM QUALIFICATIONS:

A)   Graduation from a regionally accredited or New York State
      registered college or university with a Bachelor's Degree
      including or supplemented by 24 credit hours in computer
      science or programming courses and three years of experience
      in systems programming; OR

B)   Completion of at least 60 credit hours at a regionally
      accredited or New York State registered college or university
      including l2 credit hours in computer science or programming
      courses and five years of experience in system programming;
      OR

C)   Five years of programming or data communications experience
      and three years of systems programming experience; OR

D)   An equivalent combination of training and experience as
      defined by the limits of A), B), and C) above.

NOTE: Education beyond the Bachelor's Degree in the field of
computer science may be substituted for up to one year of systems
programming

**SPECIAL NOTE - WHEN EMPLOYED BY THE BROOME COUNTY INFORMATION
TECHNOLOGY DEPARTMENT: Because of the radical evolution of
technology in this field, qualifying experience must have been
gained within the last five years.**

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COMPETITIVE