

PROGRAMMER / ANALYST

This is a more advanced position in the programmer series with programming tasks and projects of greater scope and difficulty than those assigned to other programmers. Responsibilities may include applications development, analysis, technology evaluations, gathering design specifications and system support and documentation. Work is performed under the general supervision of a higher level employee. Supervision of others may be a function of the position.

TYPICAL WORK ACTIVITIES:

Typical work activities for incumbents in this title include those listed below in addition to those work activities performed by lower level titles in the series. They are indicative of the level and types of activities performed by incumbents in this title. They are not meant to be all inclusive and do not preclude a supervisor from assigning activities not listed which could reasonably be expected to be performed by an employee in this title.

1. Performs necessary programming functions needed to satisfy application designs;
2. Develops web-based and personal computer-based applications using programming and markup languages such as C#, Python, JavaScript, HTML, and XML;
3. Develops and tests applications, as well as converts and modernizes existing applications;
4. Researches new technologies to determine how they can be incorporated into systems;
5. Assists in the application design of client requests;
6. Performs analysis for projects;
7. Prepares client, system and computer operating instructions;
8. Defines database and report specifications;
9. Creates data models using relational database systems, file-based databases, or document-based databases;
10. Keeps abreast of networking and platform dependent technical issues and applies to work as necessary;
11. Applies current technology including network and platform dependent issues to solutions.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:

Knowledge of windows and browser-based object oriented programming languages sufficient to analyze existing programs, design new applications and integrate applications within the system;

Knowledge of the current principles, practices, methods, techniques and capabilities of various computer technologies, including networking, security, storage, and database and memory management;

Knowledge of the principles and practices of systems analysis;

Ability to oversee the work of others;

Ability to understand and follow complex oral and written instructions;

Ability to keep current with technological advances and other changes in the field;

Ability to present ideas clearly and concisely, both orally and in writing;

Ability to establish and maintain effective working relationships with departmental staff and user departments, including the ability to understand and meet the user's needs;

Personal characteristics necessary to perform the duties of the position;

Physical condition commensurate with the demands of the position.

PROGRAMMER / ANALYST (cont'd)

MINIMUM QUALIFICATIONS:

- EITHER: (A) Bachelor's degree in computer science, information systems, information technology, or a closely related field AND two (2) years of recent full-time paid work experience directly developing business or governmental software applications, which primarily involved software development for Microsoft Windows or web-based environments using an object-oriented programming language;
- OR: (B) Associate's degree in computer science, information systems, information technology, or a closely related field described in (A) above AND four (4) years of recent full-time paid work experience as described in (A) above;
- OR: (C) Bachelor's degree in any field AND four (4) years of recent full-time paid work experience as described in (A) above;
- OR: (D) Associate's degree in any field AND six (6) years of recent full-time paid work experience as described in (A) above;
- OR: (E) An equivalent combination of education, training and experience between the limits of (A) and (D) above.

NOTE: Recent work experience is defined as work occurring within the ten (10) years immediately prior to the date of application.

NOTE: Qualifying work experience developing software applications includes activities related to analyzing and developing the user-interface, data model, logic, and writing application code for software systems. Developing static web page content, utility scripts, spreadsheet macros, Microsoft Access databases, or personal projects will NOT be considered as qualifying experience.

NOTE: Your degree or college credit must have been awarded by a college or university accredited by a regional, national, or specialized agency recognized as an accrediting agency by the U.S. Department of Education/U.S. Secretary of Education.

NOTE: A certification from an accredited educational institution in the subject of software development may be substituted for up to a maximum of one (1) year of required work experience.

SPECIAL REQUIREMENT:

Possession of a valid Driver License to operate a motor vehicle in New York State at time of application and to maintain the position.

DP0205

ADOPTED: 04/14/77

REVISED: 04/16/80 04/10/85 01/26/87 10/17/89 07/01/91
 02/01/99 05/08/01 01/23/17 10/28/22