



## APPLICATIONS PROGRAMMER ANALYST SERIES

**JC:** IA100, IA160, IA190  
**PG:** SEIU-3, SEIU-8, SEIU-13  
**FLSA:** Non-Exempt

**PC:** 711, 713, 714  
**BU:** 4 (SEIU)  
July 1998

### JUNIOR APPLICATIONS PROGRAMMER ANALYST APPLICATIONS PROGRAMMER ANALYST SENIOR APPLICATIONS PROGRAMMER ANALYST (DEEP CLASS)

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.*

#### **DEFINITION**

Under general supervision, performs applications systems design and modification and programming of a routine to complex nature in support of District administrative and business services; performs related work as assigned.

#### **CLASS CHARACTERISTICS**

This is a deep class, in which incumbents may be assigned to any of the three levels, depending upon experience and proficiency gained. Assigned responsibilities include both batch processing and on-line applications and are normally related to one or more functional areas, such as payroll, inventory control, financial reporting, etc. While expertise may be gained in a specific area, incumbents may be expected to become familiar with a number of applications in order to provide back-up and additional support. The work involves substantial contact with user department staff to ascertain system needs and provide user assistance. These classes are distinguished from Real Time Programmer Analyst in that the latter is responsible for real time systems design and programming related to revenue service hardware and software.

#### **REPORTS TO:**

**EXAMPLES OF DUTIES** - *Duties may include, but are not limited to, the following:*

1. Gathers and analyzes information regarding user systems and requirements and develops or modifies automated systems to fulfill these needs.
2. Conducts feasibility studies and develops system, time, equipment and cost requirements.
3. Using computer generated techniques, simulates hardware and software problems, tests and evaluates alternative solutions, and recommends and implements appropriate applications design.

4. Develops program logic and processing steps; codes programs in COBOL, FORTRAN, or other appropriate language; plans and develops test data to validate new or modified programs.
5. Designs input and output forms and documents; writes program documentation and user procedures and instructions and assists user departments and staff in utility programs to support and validate adopted systems and programs.
6. Confers with user department staff regarding assigned functional program areas; instructs and trains staff in the operation of personal computers.
7. Keeps abreast of software and hardware improvements and modifications, assesses their applications to District operations and recommends improvements to policies and procedures; maintains records and prepares periodic and special reports of work performed.

## **QUALIFICATIONS**

### **Knowledge of:**

- Computer programming principles, techniques and procedures for administrative and business applications including hierarchical and relational data base programs
- Systems analysis and design procedures and techniques; batch processing and on-line applications techniques
- Forms and documentation design techniques; operation principles and characteristics of the mainframe computer hardware such as utilized by the District
- Job planning, prioritizing and scheduling techniques; appropriate programming languages, including COBAL and FORTRAN
- Basic accounting, statistical, business administration and office procedures
- Operating principles and characteristics and maintenance practices and procedures of IBM compatible personal computers; personal computer languages such as DBASE, Paradox, and Access
- Principles and practices of information engineering
- Personal computer programming tools such as Micro focus, Workbench, Sapiens, Visual Age, and Visual Basic.

### **Skill in:**

- Analyzing systems and problems and developing new or modified programs to meet user department needs
- Developing logical procedures and coding their steps into programming instructions; developing tests to validate program design
- Troubleshooting hardware and software problems and debugging programs and applications
- Preparing clear and concise program documentation, user procedures, reports of work performed, and other written materials
- Translating user department needs into operational programs
- Instructing user department staff in the operation of personal computers, new or revised computer applications, including explaining system concepts to nontechnical users
- Applying information engineering concepts to develop high level entity relationship and data flow diagrams

- Making sound independent decisions within established guidelines; establishing and maintaining effective working relationships with those contacted in the course of the work, including working as a member of a joint application development team

**MINIMUM QUALIFICATIONS**

**Junior Applications Programmer Analyst**

**Education:**

Any combination of college and experience equivalent to graduation from a four-year college with major course work in computer science, mathematics, business administration or a closely related field.

**Substitution:**

Additional experience as outlined above may be substituted for the education. Graduation from a four-year college is preferred.

**Applications Programmer Analyst**

In addition to the above:

**Experience:**

Two years of experience in programming business applications for computer systems. Additional experience as outlined above may be substituted for the education.

**Senior Applications Programmer/Analyst**

In addition to the above:

**Experience:**

Two additional years of experience in systems design and programming business applications for computer systems. Additional experience as outlined above may be substituted for the education.

**BART EEO-1 Job Group:** 3500 - Professionals  
**Census Code:** 1010 – Computer Programmers  
**Safety Sensitive:** No