1550 – Computer Scientist (Informatics)

Major Duties of this Position May Include:

- Conducts advanced data analysis and designs highly complex algorithms using artificial intelligence (e.g., machine learning) methods.
- Coordinates the efforts of other professionals, technical specialists within the agency, other government agencies and industry pursuing various research and development projects.
- Prepares comprehensive reports that include discussion of substantive issues related to data science methodology for public health surveillance.
- Prepares materials for presentations to other scientific staff and to federal, state, and local health program managers; and other health officials and health-related organizations.

Related Competencies

- Data Analysis and Interpretation
- Data Management
- Policy Formulation
- Quality Assurance
- Advising and Consulting

Basic Requirements

Bachelor's degree in computer science or bachelor's degree with 30 semester hours in a combination of mathematics, statistics, and computer science. At least 15 of the 30 semester hours must have included any combination of statistics and mathematics that included differential and integral calculus. All academic degrees and course work must be from accredited or pre-accredited institutions.

Minimum Qualifications

In additions to meeting the basic requirements above, applicants must meet the minimum qualifications requirement as defined below:

GS-07 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-05 grade level in the Federal Service. Specialized experience for this position includes:

- Assisting with gathering data to develop approaches for strengthening the standardization and utility of national health information systems.

Or Education

One full year of graduate level education.

Or Superior Academic Achievement

Based on a bachelor's degree that is demonstrated through class standing (upper 1/3 of class); grade point average (3.0/4.0 overall or 3.5/4.0 in major), or election to membership in a qualifying national scholastic honor society.

Or Combination

You may qualify on a combination of education and experience, the total percentage of experience at the required grade level compared to the specialized experience requirement, as well as the percentage of completed education compared to the educational requirement must equal at least 100 percent.

GS-09 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-07 grade level in the Federal Service. Specialized experience for this position includes:

- Performing specific and limited portions of a study, design, research project, experiment, test, and/or other specific technical or scientific tasks related to public health informatics.

Or Education

Master's or equivalent graduate degree **or** two (2) full years of progressively higher-level graduate education leading to such a degree **or** LL.B. or J.D, if related. **TRANSCRIPTS REQUIRED**.

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 18 semester hours (27 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED**.

GS-11 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-09 grade level in the Federal Service. Specialized experience for this position includes:

- Correlating data, recognizing discrepancies in results, and performing specific operations relative to an experiment, study, design, or research project.

Or Education

Ph.D. or equivalent doctoral degree **or** three (3) full years of progressively higher-level graduate education leading to such a degree **or** LL.M., if related. **TRANSCRIPTS REQUIRED**.

Or Combination

You may qualify on a combination of education and experience. The total percentage of experience at the required grade level compared to the requirement, must equal at least 100 percent. Only graduate level education more than the first 36 semester hours (54 quarter hours) may be combined to be considered for qualifying education. **TRANSCRIPTS REQUIRED**.

GS-12 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-11 grade level in the Federal Service. Specialized experience for this position includes:

- Designing, developing, programming, documenting, maintaining, managing, and security of a public health system.

Note: There is no substitution of education for specialized experience at the GS-12 level.

GS-13 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-12 grade level in the Federal Service. Specialized experience for this position includes:

- Analyzing and validating software applications to solve complex computer requirements related to public health informatics.

Note: There is no substitution of education for specialized experience at the GS-13 level.

GS-14 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-13 grade level in the Federal Service. Specialized experience for this position includes:

- Researching, developing, testing, or deploying of technology relating to any of the following technical areas
- Automation and human factors, computer science, data analytics, machine learning, sensors, and other technologies involving public health informatics

Note: There is no substitution of education for specialized experience at the GS-14 level.

GS-15 Specialized Experience Requirements

You must have one year of specialized experience at a level of difficulty and responsibility equivalent to the GS-14 grade level in the Federal Service. Specialized experience for this position includes:

- Advising senior leadership on complex issues, risks, and challenges related to development, testing or deployment of emerging technologies and providing recommendations and/or strategic direction for decision-makers regarding public health solutions.

Note: There is no substitution of education for specialized experience at the GS-15 level.

Experience refers to paid and unpaid experience. Examples of qualifying unpaid experience may include volunteer work done through National Service programs (such as Peace Corps and AmeriCorps), as well as work for other community-based philanthropic and social organizations. Volunteer work helps build critical competencies, knowledge, and skills; and can provide valuable training and experience that translates directly to paid employment. You will receive credit for all qualifying experience, including volunteer experience.