Title: Director of Predictive Risk Analytics

Civil Service Title: Computer Systems Manager

Level: M2

Agency: NYC Department of Buildings

Salary: $60,435 - 130,000 (Annual)

Job Description

The New York City Department of Buildings ("DOB") has an immediate opening for a Director of Predictive Risk Analytics with experience in predictive modeling, data mining, statistics, and machine learning. The Director of Predictive Analytics will be supervised by the Chief Analytics Officer within the Strategic Planning and Policy Bureau.

Responsibilities include but are not limited to:

- Collecting and analyzing complex datasets from disparate sources
- Quantitative reporting, predictive analysis, and data mining
- Solving complex data questions
- Using advanced statistics and machine learning algorithms to analyze data for insights and predictions
- Identifying and interpreting trends and patterns in large and varied datasets
- Identifying opportunities to deploy predictive analytics
- Designing a framework for the Agency to remain current on latest trends, tools, and advancements in the area of analytics and data science
- Leading and managing a team of data analysts
- Training analysts how to use predictive analytics tools
- Collaborating on complex projects and reports, with diverse staff

Minimum Qualification Requirements

1. A master's degree in computer science from an accredited college and three years of progressively more responsible, full-time, satisfactory experience using information technology in computer applications programming, systems programming, computer systems development, data telecommunications, database administration, planning of data/information processing, user services, or area networks at least 18 months of this experience must have been in an administrative, managerial or executive capacity in the areas of computer applications programming, systems programming, computer systems development, data telecommunications, data base administration, or planning of data processing or in the supervision of staff performing these duties; or

2. A baccalaureate degree from an accredited college and four years of experience as described in "1" above; or
3. A four-year high school diploma or its educational equivalent approved by a State's department of education or recognized accrediting organization and six years of experience as described in "1" above; or

4. A satisfactory combination of education and experience equivalent to "1", "2" or "3" above. However, all candidates must have at least a four-year high school diploma or its educational equivalent approved by a State's department of education or recognized accrediting organization and must possess at least three years of experience as described in "1" above, including the 18 months of administrative, managerial, executive or supervisory experience as described in "1" above.

Qualification Requirements (continued)
NOTE: The following types of experience are not acceptable: superficial use of preprogrammed software without complex programming, design, implementation or management of the product; use of word processing packages; use of a hand held calculator; primarily the entering or updating of data in a system; the operation of data processing hardware or consoles.

Preferred Skills

- Master’s degree in Statistics, Data Science, Computer Science, Information Systems, Mathematics, or a closely related field
- Experience accessing, cleansing, and integrating data from disparate systems to develop analysis and models which inform operational and strategic decision making
- Exploratory analysis, predictive modeling, risk modeling, and data mining using R and/or Python;
- Extensive experience in linear and non-linear regression techniques
- Management experience leading analysts and working with IT partners
- Experience with decision trees, random forests, clustering algorithms, association rules, and neural network analysis
- Ability to program in one or more of the following: Python, R, C++, Java, SQL
- Experience with data visualization tools and programming libraries such as Tableau and D3.js is desirable
- Experience in data mining using statistical methodologies that may leverage both structured and unstructured data sources
- Optional understanding of Hadoop, Hive, MapReduce, etc
- Advanced understanding of Microsoft Excel and Access including advanced formulas, conditionals, pivot tables, visualization and chart generation
- Ability to work effectively on a team in a dynamic work environment

To Apply

- For Non-City/External Candidates: Visit the External Applicant NYC Careers site and search for the specific Job ID #
- For Current City Employees: Visit Employee Self-Service (ESS) to view and apply for available positions. Click on Recruiting Activities, Careers, and search for the specific Job ID #
- No phone calls, faxes or personal inquiries permitted.
  NOTE: ONLY THOSE CANDIDATES UNDER CONSIDERATION WILL BE CONTACTED

Work Location

Analytics & Data Science

280 Broadway, 7th Floor, N.Y.

Residency Requirement

New York City Residency is not required for this position

Posting Date: 10/26/2016 **Post Until:** 11/25/2016