



OFFICE OF THE STATE AUDITOR

DATA VALIDATION ANALYST BOSTON OFFICE

Posting Number 2019-04

SALARY RANGE (Grade 13A) CSA257: \$60,000.00 -- \$75,000.00 (Commensurate with experience)

GENERAL STATEMENT OF DUTIES

The Data Validation Analyst independently performs and documents secondary reviews of data projects for completeness, accuracy and adherence to OSA policies and procedures. The Data Validation Analyst is responsible for performing quality verification tasks and ensuring the accuracy of reported data.

SUPERVISION RECEIVED

Receives general supervision and direction from the Director of Data Analytics.

SUPERVISION EXERCISED

Provides technical supervision over 1-3 contract personnel on an as needed or project basis.

DUTIES AND RESPONSIBILITIES

- Develop SQL queries to extract, manipulate, and summarize information to verify code and results.
- Review documented project code maintained using change control software.
- Develop a level of subject matter expertise with each new project.
- Write and maintain documentation of the validation processes.
- Write validation reports containing/explaining the analyses performed and their results.
- Maintain a detailed and comprehensive record of each validation project through work papers and other acceptable project artifacts.
- Involved in good documentation practice of different stages of validation life cycle in compliance with OSA policy and procedure.
- Clearly and concisely document and communicate validation findings to team members and management.
- Provide technical decision making regarding validation strategies for complex projects.
- Perform validation and analysis of quantitative models; review to confirm proper controls and adequate documentation are in place.
- Re-perform analytics work including model creation and statistical analysis.



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- Identify risk-related issues needing escalation to management.
- Manage relationships and establish proactive cross functional interaction with auditors, business managers and IT specialists.
- Ensure timely delivery of results of secondary review by managing workload effectively.
- Works to ensure resolution of identified project problems, issues, deficiencies, inaccuracies etc. and escalates appropriately.
- Proactively identify and assist in prioritizing opportunities to streamline testing and/or quality but still stay compliant.
- Running validation tests, producing validation output summaries and assisting in the interpretation of test conclusions.
- Ensure compliance with HIPAA and other Federal and State required data policies/best practices.
- Maintain up –to-date skills of new languages, tools and technologies.
- Assist other staff as needed in providing first-tier support for audit teams by developing quantitative analyses and translating the results for non-technical staff members.
 - Design, develop and construct algorithms for use in the OSA's data analytic tool set.
 - Understand the data structure and metadata available in all OSA technical environments.
 - Develop SQL queries to extract, manipulate, and calculate information.
 - Assist team members in analysis of given data and draw correct inferences, in keeping the objectives of the analysis in mind.
 - Write reports (including ad-hoc) requested by the Auditor, Deputies, and Directors, etc.
 - Translate complex quantitative analysis for non-technical staff members.
 - Interface with audit teams and external organizations assisting in the analysis of high profile audits.
- Other duties as assigned.

MINIMUM QUALIFICATIONS

The successful candidate will possess and/or demonstrate:

- A Bachelor's Degree in Computer Science, Mathematics, Statistics, Economics.
- A high level of attention-to-detail.



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- Ability to work independently.
- Ability to communicate well with teams in the execution of validation activities both orally and in writing.
- Intermediate experience with Microsoft Office Suite.
- Demonstrated ability to navigate file structures such as CSV files, Excel spreadsheets, relational databases, cubes to locate and extract data.
- Demonstrated ability in data analysis and visualization tools (Qlik, Cognos, ArcGIS, Tableau).
- Knowledge of data analytics, data modeling and data visualization.
- Experience working with large datasets.
- Experience in areas of data wrangling, data visualization, and data integration.
- Experience with data transformation techniques and services.
- Flexibility to meet continuously changing priorities and challenges.
- Advanced Excel capabilities and related data manipulation required.
- Experience in SQL Server Management Studio and SQL Server Integration Services.
- Demonstrated ability in SQL, PL/SQL and Relational and Analytical Database concepts.
- Ability to multitask, prioritize and deliver results on time under pressure.
- Experience making data consumable for a variety of downstream purposes such as applications, visualizations, analytics and other related data science activities.
- Experience working within IT procedures and data quality requirements.
- Adept in computer languages with good technical know how.
- Excellent written and verbal communication skills.



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- Ability to read, write, and comprehend the English language.

PREFERRED QUALIFICATIONS

Demonstrated experience in the following areas will also be important considerations:

- Experience in a data analytic environment; or equivalent combination of education and experience, government experience preferred.
- One to three years of job experience in a similar role.
- Advanced SQL and PL/SQL programming.
- Demonstrated ability to build effective relationships across diverse internal and external groups.
- Ability to use analytical techniques such as critical and conceptual thinking to objectively analyze situations.
- Experience in data mining.
- Experience with social network visualization tools.
- Experience with statistical analysis such as linear regression, logical regression, factor analysis, discriminant analysis and cluster analysis.
- Experience translating complex quantitative analysis to a non-technical audience.
- Experience using data in a public policy context.
- Ability to devise solutions that maximize efficiency.
- Experience in the following programming languages: Python, C#, JavaScript, ASP.
- Experience in SQL including dynamic querying and generation of stored procedures and functions.
- Experience in process automation, especially shell scripting.
- Knowledge of database administration including data definitions, security roles, and system tables.
- Experience utilizing regular expressions.



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No Phone Calls Please:

To apply, please submit an electronic copy of a cover letter and resume, no later than **February 8, 2019** via the MassCareers website: [Click Here](#)

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