

**MAJOR FUNCTION**

This is senior professional and technical work designing, developing, and deploying data analytic, data visualization, predictive algorithms, and highly interconnected solutions for internal and external users. The Senior Analytic Architect will provide guidance to junior analytic creators regarding usage of software products, how to solve particular problems, design techniques, and common problems in data migration efforts. It is fully expected that the Senior Analytic Architect be able to perform all duties assignable to an Analytic Architect up and above any specific duties listed here, up to and including meeting with staff to discern and document requirements and craft data analytic and visualization solutions. Work is performed under the supervision of the Innovation Manager and is reviewed for achievement of desired results through regular status meetings.

**ESSENTIAL AND OTHER IMPORTANT JOB DUTIES****Essential Duties**

Shows initiative in creating mission critical system integrations, data analytics and visual renderings of business processes. Demonstrates an advanced knowledge of software products for the purposes of extract, transform, and load data migration efforts, and be ready to utilize intermediate and advanced components of those tools. Be able to work with junior developers to demonstrate strengths, weaknesses, and nuanced features of existing toolsets including but not limited to Alteryx and Tableau. Meets with functional users of business units to identify and document the business need and prioritization of effort. Proposes different ways that the solution can be provided in terms of user interface and design of dashboards, reports, and analytics. Performs details analysis and evaluation of the need and determines the appropriate mix of technical tools, custom coding, data storage, and infrastructure requirements necessary to deliver the solution. Capable of doing custom coding to augment analytics as necessary. Documents the solution in appropriate enterprise documentation systems. Plans, organizes, and conducts meetings as needed with technical and functional resources for product updates, reviews, and enhancements. Perform necessary database creation / update operations to support the solution as well as work with database administrators to perform migrations and upgrades. Provides clear and concise written and oral communications to technical staff, functional representatives and supervisor. Works in a team environment including collaborating on solutions from concept to completion. Capable of performing any duties assigned to an Analytic Architect if necessary. Performs related work as required.

**Other Important Duties**

Keeps informed and abreast of major trends and developments in information technology, and especially the areas of data analytics, data science, and data visualization by researching new technologies and software products through professional publications and other means. Participates in educational opportunities. Pursues extended education on best practices by training and/or certifications in tools being used. Communicates and relates technology trends and practices to City business community. Performs related work as required.

**DESIRABLE QUALIFICATIONS****Knowledge, Abilities and Skills**

Significant experience with data visualization, data analytic, and ETL technology including current industry trends and best practices for analytics and data migration. Knowledge of all aspects of product development cycle including Scrum and Agile programming practices. Ability to analyze and convert business requirements into design specifications. Ability to apply sound change management techniques in implementing technical solutions. Ability to work with both IDE (integrated development

environment) and text-based coding. Ability to conduct independent research and define results. Ability to devote required attention to detailed work. Able to independently schedule meetings with stakeholders and derive business requirements for crafting the eventual solution. Advanced knowledge in analytical, design, and problem-solving skills for providing solutions to complicated business problems. Skills to include, but not be limited to, use of the following tool sets: Tableau, Looker, PowerBi, QlickView, Google Studio or other data visualization tools designed to render data into visual representations. Development of solutions using Alteryx, SSIS, Talend, RStudio, Informatica or other data ETL and data science tools. A working knowledge of statistical packages commonly in use for programming purposes such as R or python. Experience in developing web applications and web services through a variety of programming languages. Database modification and query language skills for a variety of RDBMS systems. Use of web services and cloud provided applications. Microsoft office and related applications.

#### Minimum Training and Experience

Possession of a bachelor's degree in computer science or a related field and six years of technical experience in design and development of data analytics and data visualizations; or an equivalent combination of training and experience.

#### Necessary Special Requirement

Designated positions assigned to this class may require a valid Class E State driver's license at the time of appointment.

Designated positions assigned to this class may require experience in application development using Alteryx or related data analysis tools. Tableau or similar data visualization tools. Custom development using java, .net, node.js and other web development languages and technologies. The ability to understand API requirements of external systems and interface with those APIs. Experience with administration of application servers within the data analytics ecosystem such as Alteryx Server, Tableau Server, Splunk or Weblogic. Experience with communication tools such as Twilio.

Established: 07-04-20