Office of Human Resources

IT Application Architect Senior – CI2857

General Statement of Duties

Performs full performance specialized information technology work by leading the development and maintenance of the enterprise-wide applications architecture; creating and ensuring compliance with governing principles; analyzing internal and external factors that impact the City’s applications architecture; and serving as a technical expert to the organization in the use of enterprise and business applications.

Distinguishing Characteristics

First, this class is distinguished from the IT Applications Architect Associate, which performs full performance specialized information technology work developing, implementing, and maintaining specialized, complex business and enterprise applications; leading large scale, complex applications development projects; and assisting with development and maintenance of enterprise-wide applications architecture and governing principles.

Next, this class is distinguished from the IT Systems Architect, which performs full performance information technology work in the planning, designing, developing, and monitoring of information systems (specializing in Windows, UNIX, Security, Telecommunications, Data Network, and/or Storage Area Network systems) utilized within an agency or throughout the city.

Finally, this class is distinguished from the Manager Information Technology which supervises information technology professionals responsible for developing and maintaining technology infrastructure or services while managing the daily activities of an information technology work group.

Guidelines, Difficulty and Decision-Making Level

Guidelines are generally in the form of stated objectives only, with issues and factors largely undefined, requiring the employee to exercise creativity and ingenuity in devising criteria, techniques, strategy and methodologies for approaching assigned functions or projects.

Duties performed involve concepts, theories and concrete factors to be evaluated and weighed, requiring a high degree of analytical ability, and independent judgment and decision-making.

Work assignment is generally unstructured and employee is responsible for organizing complex, varied and simultaneous coordination of several functions, programs or projects in various stages of completion.

Level of Supervision Received & Quality Review

Under administrative supervision, the employee has personal accountability for carrying out an assigned function, program or project within the scope of established guidelines and objectives and is expected to resolve problems that arise in the normal course of the work. Completed work is generally reviewed for soundness of judgment, conclusion, adequacy and conformance to policy.

Interpersonal Communication & Purpose

Contacts of a remedial nature involving the resolution of problems and where some degree of discretion and judgment are required in carrying out a major program and/or function of the organization.

Level of Supervision Exercised

By position, may perform lead work on a project or rotating basis.
**Essential Duties**

Leads the development and maintenance of the enterprise-wide applications architecture, which includes defining and implementing applications architecture standards, continuous refinement activities, and the architecture review process.

Acts as a technical expert on enterprise applications architecture by providing guidance to information technology professionals and clients on the integration of applications architecture standards into business and information technology processes. Ensures that the development and ongoing evolution of application architecture meets current and future business needs.

Consults on and develops governing principles to guide application architecture decision making; ensures that the governance structure and compliance activities are aligned to applications architecture best practices.

Analyzes the current information technology environment to detect any critical deficiencies and recommends solutions for improvement. Analyzes current and future information technology industry trends to determine the potential impact on the business or enterprise applications architecture.

Conducts research to identify client needs for enterprise-wide applications and develops applications solutions, while ensuring compliance with applications architecture principles and strategies. Formulates and defines scope and objectives of solution based on client needs.

Develops or assists with developing cost estimates, funding requests or proposals based on level of effort for architecture related items

Utilizes current tools to create and maintain architecture documents for systems and applications

Leads the design of complex or large scale applications or systems to include: creating specifications and documentation

Consults with other application architects as well as project and infrastructure teams to ensure solutions comply with application architecture standards; identifies circumstances when it may be necessary to modify the applications architecture to accommodate project needs.

By position, performs lead work over other information technology professionals or performs project management duties.

Performs other related duties as assigned or requested.

Any one position may not include all of the duties listed. However, the allocation of positions will be determined by the amount of time spent in performing the essential duties listed above.

**Competencies**

Creative Thinking – Uses imagination to develop new insights into situations and applies innovative solutions to problems; designs new methods where established methods and procedures are inapplicable or are unavailable.

Decision Making – Specifies goals and obstacles to achieving those goals, generates alternatives, considers risks, and evaluates and chooses the best alternative in order to make a determination, draw conclusions, or solve a problem.
Oral Communication – Expresses information to individuals or groups effectively; taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others, attends to nonverbal cues and responds appropriately.

Technical Application - Uses machines, tools, instruments, or equipment effectively; uses computers and computer applications to analyze and communicate information in the appropriate format.

Technical Competence – Uses knowledge that is acquired through formal training or extensive on-the-job experience to perform one's job; works with, understands, and evaluates technical information related to the job; advises others on technical issues.

Technical Problem Solving - Troubleshoots, diagnoses, analyzes, and identifies system malfunctions to determine the source and cause of the problem.

Writing - Writes in a clear, concise, organized, and convincing manner for the intended audience.

<table>
<thead>
<tr>
<th>Knowledge &amp; Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of developments and new applications of information technology (hardware, software, telecommunications), emerging technologies and their applications to business processes, and applications and implementation of information systems to meet organizational requirements.</td>
</tr>
<tr>
<td>Knowledge of application architecture principles, methods, and techniques used in the design and development of applications</td>
</tr>
<tr>
<td>Knowledge of the principles, methods, and tools for designing, developing, and testing software in a given environment.</td>
</tr>
<tr>
<td>Knowledge of current information systems trends and technologies.</td>
</tr>
<tr>
<td>Knowledge of data processing sufficient to be able to review program specification, design programs and write or modify code.</td>
</tr>
<tr>
<td>Knowledge of information technology systems analysis, including systems design, sufficient to be able to maintain current systems and implement new systems.</td>
</tr>
<tr>
<td>Knowledge of the principles, methods, and tools for analyzing and developing software test and evaluation procedures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree in Computer Science, Computer Information Systems, Business Administration, Mathematics, or a related field.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three (3) years of professional information technology experience developing and maintaining enterprise-wide applications architecture, to include two years at the type and of the level of the Applications Architect I.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education &amp; Experience Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) year of the appropriate type and level of experience may be substituted for each required year of post-high school education.</td>
</tr>
<tr>
<td>Additional appropriate education may be substituted for the minimum experience requirements.</td>
</tr>
</tbody>
</table>
## Licensure & Certification

None

## Working Environment

Subject to many interruptions.
Subject to long irregular hours.
Pressure due to multiple calls and inquiries.

## Level of Physical Demand

1-Sedentary (0-10 lbs.)

## Physical Demands

(Physical Demands are a general guide and specific positions will vary based on working conditions, locations, and agency/department needs.):

- **Standing:** Remaining on one’s feet in an upright position.
- **Sitting:** Remaining in the normal seated position.
- **Talking:** Expressing or exchanging ideas by means of spoken words.
- **Hearing:** Perceiving the nature of sounds by the ear.
- **Repetitive Motions:** Making frequent movements with a part of the body.
- **Visual:** Near Acuity: Ability to see clearly at 20 inches or more.
- **Accommodation:** Ability to adjust vision to bring objects into focus.
- **Color Vision:** Ability to distinguish and identify different colors.
- **Lifting:** Raising or lowering objects weighing no more than 10 pounds, from one level to another.

## Background Check Requirement

- Criminal Check
- Education Check
- Employment Verification

By position, Motor Vehicle Record

## Assessment Requirement

None

## Probation Period

Six (6) months.

## Class Detail

- **Pay Grade:** I-816
- **FLSA Code:** Y
- **Management Level:** 10
- **Established Date:** 9/21/2018
- **Established By:** Lori Schumann

---

City and County of Denver