

ASSOCIATE IT SOLUTIONS ARCHITECT
IT SOLUTIONS ARCHITECT

Class Codes
3830
3823

DEFINITION

An IT Solutions Architect designs, develops, and oversees IT architectural cloud, security, or data solutions for an IT Branch in alignment with business goals, technical requirements, and District strategic plans. An Associate IT Solutions Architect assists an IT Solutions Architect with major activities related to the design and development of IT architectural solutions.

TYPICAL DUTIES

Designs and develops architectural solutions that incorporate business goals with new or existing technology for an IT Branch and ensures solutions align with District strategic plans.
Documents and maintains reference architectures, roadmaps, and best practices for IT solutions.
Documents and designs the District's cyber security architecture, systems, and services and aligns the architecture to industry best practices and standards.
Collaborates with other IT Solutions Architects and IT teams to implement and integrate solutions that are compatible with the District's IT enterprise.
Proposes and develops plans to integrate on-premise and cloud-based solutions.
Identifies and synthesizes the components and subcomponents required for a solution's success.
Incorporates cloud technology architecture in data system architecture.
Architects data lakes to expand the type and amount of data captured and ensure a repository of historical data is maintained and accessible through proper data governance practices.
Coordinates and leads various architectural planning committees or centers of excellence, such as cloud center of excellence, data architecture task force, or cyber security review board.
Serves as a District expert and advisor regarding the architecture of their area of focus and related emerging technologies such as cloud computing, Artificial Intelligence, automation, and machine learning.
Architects cloud infrastructure solutions for storage, computing, and application hosting.
Defines and enforces standards, practices, and guidelines for solution development and integration such as proper data governance practices, application standards shared between systems, and security compliance practices to ensure District IT enterprise-wide compatibility.
Assesses existing architectures to recommend improvements and bridge gaps within an architecture and between systems.
Identifies and mitigates risks and potential impacts associated with new architectural solutions and improvements to existing architectures.
May lead or supervise a team of technical personnel.
Performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS AMONG RELATED CLASSES

An IT Solutions Architect serves as an IT architectural cloud, security, or data solutions expert, designs architectural IT solutions for business goals, and ensures the solutions are consistent with industry standards, the District strategic plan, and are properly integrated across the District IT enterprise.

An Associate IT Solutions Architect assists an IT Solutions Architect with the major activities related to the solutions architecture for an IT Branch.

A Senior Administrator is responsible for all areas of their IT Branch and advises the Chief Information Officer on the technical strategy pertaining to these systems and services for the division.

The Chief Information Security Officer is responsible for the development of a strategic, comprehensive, and adaptable information security program designed to protect the District's information assets and provides the overarching strategy for District information security.

SUPERVISION

An IT Solutions Architect receives administrative direction from a Senior Administrator or the Chief Information Security Officer and may provide administrative direction to Associate IT Solutions Architects and lower-level technical staff. An Associate IT Solutions Architect receives administrative direction from an IT Solutions Architect or higher-level administrator and provides general direction to lower-level technical staff.

CLASS QUALIFICATIONS

Knowledge of:

- Applicable education code laws, regulations, and guidelines related to cyber security
- Limitations of information technology hardware, software and services
- Interdependencies of technologies
- Project management methodologies
- Internet applications such as e-mail, internet, netnews, etc.
- Security controls for networking devices, operating systems, application, web, and cloud-based solutions

Ability to:

- Manage multiple large projects simultaneously
- Develop, plan, and implement short and long-range goals
- Integrate and collaborate successfully with peers
- Formulate and express ideas clearly and effectively in writing and orally
- Set priorities and successfully complete tasks in a timely manner
- Analyze and interpret materials and problems involving rules, procedures, documentation, and related matters
- Maintain effective relationships with District personnel and representatives of manufacturers and other organizations
- Motivate and lead employees
- Transform business requirements into IT systems architecture

ENTRANCE QUALIFICATIONS

Education:

Graduation from a recognized college or university with a bachelor's degree, preferably in electrical engineering, mathematics, computer science, data science, cybersecurity, or a related field. Qualifying experience in addition to that listed below may be substituted for the required education on a year-for-year basis provided that graduation from high school or

evidence of equivalent educational proficiency is met. An advanced degree in systems management, engineering, or computer science is preferable.

Experience:

Data Emphasis:

Associate IT Solutions Architect: Three years of experience in an enterprise-wide environment in data and analytics platform architecture, data integration, data modeling, and data technology platform and management.

IT Solutions Architect: Five years of experience in an enterprise-wide environment in data and analytics platform architecture, data integration, data modeling, and data technology platform and management.

Or

Cloud Infrastructure Emphasis:

Associate IT Solutions Architect: Three years of experience in an enterprise-wide environment designing, implementing, and supporting cloud infrastructure solutions. The aforementioned experience must have included cloud platform architecture, management, maintenance, and governance.

IT Solutions Architect: Five years of experience in an enterprise-wide environment designing, implementing, and supporting cloud infrastructure solutions. The aforementioned experience must have included cloud platform architecture, management, maintenance, and governance.

Or

Cybersecurity Emphasis:

Associate IT Solutions Architect: Three years of designing, engineering, implementing, and managing secure, enterprise-wide network infrastructure and implementing technologies on various platforms. The aforementioned experience must include experience in leading security requirement analysis, design, implementation, and support with third-party compliance objectives such as FERPA, HIPAA, CJIS, etc.

IT Solutions Architect: Five years of experience designing, engineering, implementing, and maintaining a secure, enterprise-wide network infrastructure and implementing technologies on various platforms. The aforementioned experience must include experience in leading security requirement analysis, design, implementation, and support with third-party compliance objectives such as FERPA, HIPAA, CJIS, etc.

Special:

A valid driver's license to legally operate a motor vehicle in the State of California and the use of a motor vehicle.

Data Emphasis:

Microsoft Certified Power Platform Solution Architect Expert is required.

Cloud Infrastructure Emphasis:

AWS Certified Solution Architect-Professional, Google Professional Cloud Architect, or MS Certified Azure Solutions Architect Expert is required.

Cybersecurity Emphasis:

Certified Information Systems Security Professional (CISSP) is required.

A Microsoft Certified Cybersecurity Architect, MS Certified Cybersecurity Architect Expert, or AWS Certified Security – Specialty certification is preferable.

Project Management Professional (PMP), IT Infrastructure Library (ITIL), Open Group TOGAF Certified Enterprise Architect Practitioner, or equivalent certifications are preferable.

This class description is not a complete statement of essential functions, responsibilities, or requirements. Entrance requirements are representative of the minimum level of knowledge, skill, and /or abilities. To the extent permitted by law, management retains the discretion to add or change typical duties of a position at any time, as long as such addition or change is reasonably related to existing duties.

New Class

05-19-23

LKD/MCV