

## **Duty Statement**

Classification: Information Technology Specialist II

Position Number: 275-810-1414-005

HCM#: 8225

Branch/Section: Information Technology Service Branch / Enterprise Solutions Development Division / Software Engineering Support Section / Application Engineering & Architecture /

**Architecture & Development** 

Location: Sacramento, CA

Working Title: Senior Application Engineer

Effective Date: September 1, 2024

Collective Bargaining Identifier (CBID): R01

Supervision Exercised: ☐ Yes ☒ No

Telework: 

☐ Office-Centered ☐ Remote-Centered ☐ Not Eligible

The Enterprise Solutions Development Division (ESDD) provides the infrastructure and application services for most of the business functions within CalPERS and its eight Regional Offices. The ESDD collaborates with other divisions to meet the business needs by providing quality, innovative, and sustainable services for business continuity.

The Software Engineering Support Section (SESS) provides a variety of critical technical support services to the CalPERS Business Divisions and their customers germane to the CalPERS business lines of work, including Web Site Services, systems development and support for batch and online processing, ad-hoc reporting, business rules implementation, and workflow management.

Under general direction of the Information Technology (IT) Manager I in the Application Engineering & Architecture unit, the IT Specialist II (ITS II) works as an Application Engineer and the lead Application Architect (AA). The ITS II works both independently and cooperatively with other IT team members performing the most complex work around analysis, design, planning and implementation, along with providing high level guidance and direction using a holistic approach for the successful development and execution of strategy. The ITS II position works primarily in the Software Engineering domain.

## **Essential Functions**

Regular and consistent attendance in the office at least three days a week for teamwork, in-person collaboration, personal interactions with members, stakeholders, and other team members, crossfunctional communications within CalPERS. In-person collaboration is essential to promote and foster innovation, creativity, and complete engagement by the team. Coordinating work in person allows the teams to stay functional and aligned with the work of others. Being present in the office is essential to allow for immediate accessibility for discussions, questions, mentoring, or strategy sessions between team members.

40%

Onsite<sup>1</sup> and virtually, serves as a lead and Senior Application Engineer in Application Engineering & Architecture (AEA). Works with the Solutions Architects in reviewing proposed changes to the systems like Customer Education Center (CEC) and Actuarial Valuation System (AVS) (application, commercial off-the-shelf (COTS) products, database, etc.), and makes recommendations to managers, developers, and end users to ensure the system changes will meet functional and technical requirements. Serves as a lead Subject Matter Expert (SME) by analyzing and troubleshooting problems in the persistence layer such as performance, reliability and functionality, and designs and builds application architecture components and performs software quality assurance processes on code to ensure that all code and objects produced adheres to existing standards and procedures. Applies architectural principles and practices to lead the organization through the business, information, process, and technology changes necessary to execute strategies within the systems developed, administered and maintained by AEA. Provides both functional and related business process reviews for the most complex systems in regard to major application development, integration efforts, and business process changes. Reviews business changes, functional architecture design, coding design, and organizational strategic objectives to determine impacts. Acts as the liaison between program area, Business Analysts, technical team members, and implementation team members in assisting with optimal solutions across the software development lifecycle (SDLC). Coordinates and ensures effective operations of multiple hardware and software configurations including integration with the enterprise technical architecture and provides technical analysis and recommendations pertaining to application architecture issues. Works directly with developers and architects to resolve the most complex architecture, programming, and database interfaces issues. Designs and builds the most complex applications and performs software quality assurance processes on code to ensure that all code produced by the Application Engineering and Support Team adheres to existing standards and procedures. Coordinates and ensures effective operations of complex multiple hardware and software configurations including integration with the enterprise technical architecture. Reviews design layouts, Java code and Structured Query Language (SQL) statements to identify potential problem areas and initiate corrective actions. Performs operational readiness assessment prior to deployment to controlled environments. Develops and reviews operational documentation.

40%

Onsite and virtually, serves as the lead Application Architect (AA) applying architectural principles and practices to lead the organization through the process and technology changes necessary to execute strategies within enterprise systems like CEC, AVS and similar systems and sub-systems. Responsible for performing the most complex analysis of technical architecture and design for enterprise systems like CEC, AVS and similar systems and sub-

systems. Provides analysis for request for services for new systems development or changes to existing systems development. Provides recommendations to assist management in making decisions by documenting the impact of proposed system changes, an estimate on the complexity of the change, the impact of legislative changes, when applicable, the pros and cons associated with the change, the estimated cost of the change, an estimated level of effort (LOE) for the change along with alternatives for management to consider. Works cooperatively across various areas of the Information Technology Services Branch and the business areas. Mentors subordinate team members in performing regular analysis of the incidents to identify problems and identify the appropriate teams to resolve the problems. When Senior level input is required, provides expert level analysis. Acts as the lead general developer and architect for software applications, designs and builds applications and performs software quality assurance processes on code to ensure that all code produced by the Architecture Team adheres to existing standards and procedures. Identifies and promotes the definition, maintenance and reuse of common business objects, processes and practices and utilizes business analysis documentation in order to produce architecture, conceptual and implementation artifacts.

Onsite and virtually, ensures subordinate team members work in collaboration with other divisions on enterprise wide technology changes. Leads subordinate team members for multi-divisional work efforts. Provides production implementation oversight as needed for new and enhanced application implementations. Advises on and recommends performance improvements related to the application architecture. Consults with Senior Management on architecture issues that include trends, protocol, methodologies, and frameworks. Collaborates with Application Architecture and Enterprise Architecture during the implementation of application and system changes. Analyzes current architecture to identify weaknesses and to develop opportunities for improvements such as expanding capacity, reducing response time, and increasing effectiveness. Provides on-the job training for new programmer analysts in order to promote successful work products.

Onsite and virtually, works in collaboration with other divisions on enterprise wide technology changes. Serves as a liaison to enterprise level projects. Provides reports on status of projects and work requests to managers both orally and written.

## **Working Conditions**

- <sup>1</sup> This position is designated as office-centered and works primarily onsite at the Sacramento, CA -Headquarters at least three weekdays.
- Workstation is located in a standard multi-level office building accessible by stairs and elevator, with artificial light, height-adjustable desk, and adjustable office chair.
- Prolonged reading and typing on a laptop or keyboard and monitor.

## **Conduct, Attendance and Performance Expectations**

- Ability to maintain consistent attendance.
- Ability to demonstrate punctuality, initiative, and dependability.
- Ability to model and support CalPERS Core Values (Integrity, Accountability, Respect, Openness, Quality and Balance).
- Ability to model CalPERS Competencies and demonstrate proficiency in; Collaboration, Leading People, Leading Change, Driving Results, Business Acumen, Communication, and Leading Self.

Supervisor Signature:	Date:
I certify that the above accurately represent the duties of the position.	
Employee Signature:	Date:
Employee Name (Print):	
with or without reasonable accommodation.	

I have read and understood the duties and essential functions of the position and can perform these duties