DUTY STATEMENT

1. POSITION INFORMATION

Civil Service Classification	Working Title
Information Technology Specialist II	Data Integration Architect
Employee Name Vacant	Position Number 791-753-1414-004
Project/Division Name Child Welfare Digital Services	Supervisor's Name Mani Jha
Unit Architecture and Engineering	Supervisor's Classification Information Technology Manager I
Physical Work Location 2870 Gateway Oaks Blvd., Sacramento, Ca 95833	Duties Based on: ☒ Full Time ☐ Part Time - Fraction Click here to enter text.
Effective Date TBD	

2. REQUIREMENTS OF POSITION

Check all that apply:

☒ Conflict of Interest Filing (Form 700) Required   ☒ Requires Fingerprinting & Background Check

☐ May be Required to Work in Multiple Locations   ☐ Other *(specify below in Description)*

Description of Position Requirements *(e.g., the position may move from project to project upon business need, managing staff at an alternate location, graveyard/swing shift, frequent travel, etc.)*:

Click here to enter text.

3. DUTIES AND RESPONSIBILITIES OF POSITION

IT Domains used:

☐ Business Technology Management   ☐ Information Technology Project Management

☐ Client Services   ☒ Software Engineering

☐ Information Security Engineering   ☒ System Engineering

Summary Statement (Briefly describe the position's organizational setting and major functions):

Under the general direction of the Architecture and Engineering Chief (ITM I), the Data Integration Architect serves in a key state role in the iterative development and operation of the Child Welfare Services - California Automated Response and Engagement System (CWS-CARES). CARES is a highly regulated, safety-critical and data-intensive system that comprises Customer Relationship Management (CRM) Platform as a Service (PaaS)-based applications and data/analytics services provided through the CARES Data Infrastructure (CDI). The incumbent provides architectural steering to multi-disciplinary Product Delivery Teams (PDTs), with a focus on the flow, storage and use of data across PaaS-based applications and the CDI.

Percentage of Duties	Essential Functions
40%	Contributes to goals of the CARES Architecture and Engineering Chief by providing architectural and engineering steering, along with hands-on support, to multi-disciplinary Product Delivery Teams (PDTs). Tasks include: • Writing and testing scripts, transformation/calculation logic, database object definitions, API specifications and other code. • Contributing to the planning of the overall organizational IT strategy for the CARES Enterprise Architecture, including detailed data integration views. • Developing the CARES Product organization, including building data literacy on the Product team. • Developing and maintaining CARES Architecture & Engineering Standards and Practices.

	• Developing and maintaining the CARES Domain Model, including the translation of the conceptual (canonical) model to logical and physical schemas, on the CDI, tailored to various analytic use cases. • Monitoring and maintaining the flow, storage and use of data across PaaS-based applications and the CDI, which, together, make up the CARES system of record. CDI-based services may include logs, registries, immutable event histories, longitudinal data stores, graph data stores, unstructured data stores, metric calculation logic, statistical processing, data services (and APIs) supporting the exchange of data with external partners and ad-hoc query and visualization tools. • Developing and implementing the CARES Data Conversion Workspace. • Monitoring and conducting audits of system performance and other metrics analysis. • Verifying the stability, interoperability, and scalability of CARES system architecture.
35%	The Data Integration Architect clearly demonstrates team leadership competencies, collaboration, and models the organization values. Tasks include: • Conducting planning, research, proofs of concept and analyses of architectural and technical trade-offs in the configuration, integration and operation of PaaS-based applications and the CDI. • Managing the portfolio of CDI-based tools/products and associated vendor relationships. • Leading, mentoring and supervising project teams, which may include multi-disciplinary Product Delivery Teams (PDTs). PDTs include diverse CWDS team members comprised of researchers, experience designers, data scientists, business analysts, system engineers, system architects, subject matter experts, test coordinators and external partners. Supervision includes teaching management methodologies to ensure project compliance with State policies and project alignment with Project goals. • Develop and implement standards and controls that ensure reliability. • Keeping abreast on emerging architectural paradigms and enabling technologies, such as Domain Driven Design (DDD), stream processing, graph processing, multi-cloud data pipelines, data meshes, machine/deep learning, research notebooks (e.g. Jupyter) and data product management.
20%	The Data Integration Architect will be responsible for some Business Technology Management domain duties though they are not typical of the ITS II classification. Tasks include: • Monitoring and evaluating contractor performance and the quality of deliverables via the Work Order Authorizations (WOAs) process. Making recommendations to the Architecture and Engineering Chief on how to improve vendor performance and collaboration between vendor and State staff.
Percentage of Duties	Marginal Functions
%	*Click here to enter text.*
5%	Perform other duties as assigned.

4. WORK ENVIRONMENT *(Choose all that apply from the drop-down menus)*

Standing:	Infrequent (7-12%)	Sitting:	Frequent (51-75%)
Walking:	Infrequent (7-12%)	Temperature:	Temperature Controlled Office Environment
Lighting:	Not Applicable	Pushing/Pulling:	Not Applicable
Lifting:	Not Applicable	Bending/Stooping:	Not Applicable
Other:	*Click here to enter text.*		
Type of Environment:	a. High Rise b. Cubicle		
Interaction with Public:	a. Required to assist customers on the phone and in person. b. Select c. Select.		

5. SUPERVISION

Supervision Exercised *(e.g., Directly – 1 Information Technology Supervisor II; Indirectly – 5 Information Technology Associates)*

None.

6. SIGNATURES

Employee's Statement:

I have reviewed and discussed the duties and responsibilities of this position with my supervisor and have received a copy of the Duty Statement and can perform the duties outlined above without a Reasonable Accommodation.

Employee's Name (Print)

Employee's Signature	Date

Supervisor's Statement:

I have reviewed the duties and responsibilities of this position and have provided a copy of the Duty Statement to the Employee.

Supervisor's Name (Print)
Mani Jha

Supervisor's Signature	Date

7. HRD USE ONLY

Human Resources Division Approval

☒ Duties meet class specification and allocation guidelines.	HR Analyst initials	Date approved
☐ Exceptional allocation, 625 on file.	NM	5/5/2021

Reasonable Accommodation Unit use ONLY *(completed after appointment, if needed)*

* If a Reasonable Accommodation is necessary, please complete a Request for Reasonable Accommodation form and submit to Human Resource Division (HRD), Reasonable Accommodation Coordinator.

List any Reasonable Accommodations Made:
Click here to enter text.

** AFTER SIGNATURES ARE OBTAINED:
- **SEND THE ORIGINAL DUTY STATEMENT TO HRD TO FILE IN THE EMPLOYEE'S OFFICIAL PERSONNEL FILE (OPF)**
- **PROVIDE A COPY TO THE EMPLOYEE**
- **FILE A COPY IN THE SUPERVISOR'S DROP FILE**