CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

X PROPOSED	
☐ CURRENT	

DUTY STATEMENT

	EFFECTIVE DATE
BRANCH Technology Services	**POSITION NUMBER** (Agency – Unit – Class – Serial) 815 - 626 - 1414 - 024
DIVISION/UNIT Enterprise IT Solutions & Innovation / Data Solutions	**CLASS TITLE** Information Technology Specialist II
INCUMBENT NAME	**WORKING TITLE** Data Architect

CalSTRS is dedicated to securing the financial future and sustaining the trust of California's educators through customer service, accountability, leadership, strength, trust, respect, and stewardship.

Under the general direction of the Information Technology Manager I, Data Solution Services manager, the Information Technology Specialist II (ITS II) will act as the Data Architect and serves as the data architecture expert and technical leadership for CalSTRS business intelligence and data warehousing (BI&DW) solutions, and is responsible for various data architecture, data governance, business support, and hands-on data delivery tasks.

The Data Architect performs a variety of complex mission critical functions requiring unique skills to effectively build organizational data architectures and solutions for business intelligence use cases design and implementation. The Data Architect must engage, collaborate, and deliver division strategic goals to add business value to users and members. The Data Architect shall lead by example with strong hands-on in data security, data architecture, cloud managed services, and integration with CalSTRS Analytic Platform. The incumbent must be capable of promoting and demonstrating the business value of new cloud data solutions, building industrial level data architecture, developing pilots, and leading teams to scaling up and delivering to production.

% of time performing duties	Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first.
30%	**ESSENTIAL FUNCTIONS** Establish and enforce data governance polices, standards, and procedures to ensure the data quality, security, and compliance with regulations. Implement data security measures and privacy controls to protect member data and ensure compliance with data protection regulations. Lead the design and development of data architecture of the organization business intelligence and data warehouse program, ensuring it aligns with business goals, scalability requirements and industry best practices. Design and implement data architectures in cloud environments, leveraging services from platforms such as AWS, Azure, or Google Cloud. Develop and implement disaster recovery and backup plans to ensure data availability and resilience in case of system failures or data loss. Monitor and optimize system performance and security, conducting data warehouse performance tuning and implementing the strategies to ensure efficient data retrieval. Implement master data management strategies for consistency and accuracy and maintain repositories to document data defiltrations, lineage, and relationships.
25%	Provide expert-level recommendations to the current and future data exchange patterns, data pipelines, data extract-transformation-load, data lifecycles, data analytics solutions, data quality, data catalog, data governance, and other data-related work. Actively participate in the development, maintenance, planning, and execution of the enterprise data strategy. Develop and ensure data delivery best practices. Lead the CalSTRS Analytics Platform and team members into new areas of data analytics capabilities (for example, artificial intelligence, machine learning, predictive analytics, prescriptive analytics, and so on). Collaborate on the design and promotion of standards across all data functions, technologies, methodologies, delivery, and communication of these concepts. Set goals and drive the acquisition of new data and refinement of existing data sources based on strategic initiatives.
20%	Collaborate with the Data Solutions Services team, the Business Analysis & Prototyping team, the Enterprise Release Management team, Cloud Solution Architect, Enterprise Architects, Infrastructure & Operations teams, the Information Security Office, Database Administrators, Disaster Recovery administrators and others to deploy technologies that deliver the desired business data outcomes and provide resiliency. Ensure optimal efficiency in data delivery and high customer services to CalSTRS internal stakeholders. Collaborate with business teams toward data analytics and automation enablement through training, workshop, knowledge transfer, and being a trusted advisor. Demonstrate business benefits by minimizing the cost and effort of delivering data. Deliver feature-rich and automated data analytics solutions that are user-friendly and allow users to focus on their work to achieve their objectives. Enable teams to solve problems using data. Educate data users and engineers how to work effectively

	with large amounts of data records. Develop algorithms and predictive models to solve critical business problems.
20%	Lead the development and implementation of innovative technologies by collaborating with architects, technical teams & business analysts, evaluating potential value and risks associated with emerging technologies, and making recommendations on enhancing and/or developing approaches data analytic related projects and operations including but not limited to Agile methodologies, DevOps, DataOps. Support and guide data governance efforts including meta data management, data catalogs, tagging data, lineage tracing, and other tasks.
5%	**MARGINAL FUNCTIONS** May be called upon to participate in testing activities or quality assurance reviews of code and documentation for other team members or teams.

COMPETENCIES

Core Competencies. All employees are responsible for understanding and demonstrating CalSTRS' core competencies:
- Adaptability/Flexibility
- Communication
- Customer/Client Focus
- Teamwork
- Work Standards/Quality Orientation

Classification Competencies. All employees are expected to understand and demonstrate their position's CalSTRS class competencies:
- Decision Making
- Diagnostic Information Gathering
- Ethics and Integrity
- Influencing Others
- Interpersonal Skills for Relationship Building
- Planning and Organizing
- Professional and Personal Development
- Technical/Professional Knowledge and Skills
- Thoroughness

CONDUCT AND ATTENDANCE EXPECTATIONS
- Communicate effectively with individuals from varied experiences, perspectives and backgrounds
- Deal with individuals in a tactful, congenial, personable manner
- Must maintain consistent and regular attendance
- Adhere to CalSTRS policies and procedures
- Ability to support and model CalSTRS Core Values

WORKING CONDITIONS AND PHYSICAL ABILITIES REQUIRED OF THE JOB
- Prolonged periods of standing or sitting
- Work in a high-rise building, in an open space environment
- Ability to use a computer keyboard several hours a day
- Read from computer screens several hours a day
- Ability to move up to 10 pounds

Responsible for promoting a safe and secure work environment free from discrimination, harassment, inappropriate conduct, or retaliation by adhering to CalSTRS' policies and processes. Responsible for participating in mandated HR or EEO training workshops (i.e. Sexual Harassment, EEO, etc.).

To be reviewed and signed by the supervisor and employee:

SUPERVISOR'S STATEMENT:
- *I HAVE DISCUSSED THE DUTIES AND RESPONSIBILITIES OF THE POSITION WITH THE EMPLOYEE*
- *I HAVE SIGNED AND RECEIVED A COPY OF THE DUTY STATEMENT*

SUPERVISOR'S NAME (Print)	SUPERVISOR'S SIGNATURE	DATE SIGNED

EMPLOYEE'S STATEMENT:
- *I HAVE DISCUSSED THE DUTIES AND RESPONSIBILITIES OF THE POSITION WITH MY SUPERVISOR*
- *I HAVE SIGNED AND RECEIVED A COPY OF THE DUTY STATEMENT*
- *I AM ABLE TO PERFORM THE ESSENTIAL FUNCTIONS LISTED WITH OR WITHOUT REASONABLE ACCOMMODATION*
- *I UNDERSTAND THAT I MAY BE ASKED TO PERFORM OTHER DUTIES AS ASSIGNED WITHIN MY CURRENT CLASSIFICATION, INCLUDING WORK IN OTHER FUNCTIONAL AREAS AS BUSINESS NEEDS REQUIRE*

EMPLOYEE'S NAME (Print)	EMPLOYEE'S SIGNATURE	DATE SIGNED