**Texas A&M University Software Engineer IV Generic Job Description**

**Classification Title:** Software Engineer IV

**FLSA Exemption Status:** Exempt

**Pay Grade:** 77

**Job Description Summary:**

The Software Engineer IV, under general direction, develops and leads large and complex components and systems. Capable of leading a small team, mentoring engineers, and providing technical guidance. Conducts code reviews and designs and delivers on small projects end-to-end. Develops complex web applications, desktop applications, and relational databases to include design, writing, installing, documenting, and/or testing (full stack) based on user requirements and analysis.

**Essential Duties and Tasks:**

**20%: End-to-End Complex Application Development and Testing**

* Conducts code reviews and designs and delivers on small projects end-to-end.
* Develops complex web applications, desktop applications, and relational databases to include design, writing, installing, debugging, troubleshooting, documenting, and/or testing (full stack) based on user requirements and analysis.
* Develops complex solutions on the appropriate platforms (desktop application, web application) as required by projects.

**20%: System Setup, Maintenance, and Documentation Leadership**

* Leads and/or coordinates efforts to set up, configure, maintain, and administer server and client systems.
* Ensures all code meets security standards. Maintains familiarity with version control and containerization.

**20%: Needs Assessment, Complex Documentation and Review**

* Assesses client needs and develops requirements.
* Performs analysis based on user requirements.
* Prepares complex system and program documentation for clients and technical staff.
* Reviews system and program documentation for accuracy and completeness.

**20%: Professional Growth, Standards Compliance and Leadership**

* Keeps current in professional growth.
* Keeps current on state/university rules and regulations with regards to technical responsibilities.
* Follows policies, procedures, and various standards.
* Makes recommendations for improvement of programming tools and strategies as part of the development process.
* Develops and leads large and complex components and systems.
* Capable of leading a small team, mentoring junior software engineers, and providing technical guidance.
* May supervise software engineers or student employees.

**20% Duty Title (for the department's use)**

* Remaining Percentage Can Be Determined by Department to Meet Business Needs or Can Be Incorporated into Percentages Above.

**Required Education and Experience:**

* Bachelor’s degree or equivalent combination of education and experience. Seven years of software development/engineering, applications development, programming, systems architecture or related experience.

**Required Licenses and Certifications:**

* None

**Required Knowledge, Skills, and Abilities:**

* Knowledge of programming languages, software development lifecycle and security principles and best practices.
* Coding, software development, problem solving, testing, debugging, communication and collaboration skills.
* Ability to work with complex problems.

**Machines and Equipment:**

* Computer: 35 hours.

**Physical Requirements:**

* None

**Other Requirements and Factors:**

* This position is security sensitive.
* This position requires compliance with state and federal laws/codes and Texas A&M University System/TAMU regulations and procedures.
* Works to cover shifts, or take emergency call, on evenings, weekends, and holidays as required.

**Is this role ORP Eligible? If so, it needs to meet the criteria on the** [**Rules and Regulations of the Texas Higher Education Coordinating Board**](https://reportcenter.highered.texas.gov/reports/data/user-friendly-version-of-ch-25/)**.**

[ ]  **Yes**

[x]  **No**

**Does this classification have the ability to work from an alternative work location?**

[x]  **Yes**

[ ]  **No**