Job Description

The Embedded Software Engineer is responsible for ensuring quality designs through comprehensive software requirement validation. This role involves developing and executing embedded software and module testing, long-term growth strategies, and continuous improvement. The position requires technical expertise to develop software test cases and lead software validation testing.

Responsibilities

- Generate comprehensive test cases from functional requirements through understanding of software and aircraft architecture.
- Design and implement automated test scripts and manual test procedures that validate product requirements and functional specifications, design documents, and external application standards.
- Review system requirements specifications and support software test plans, test specifications, test cases, test reports, and bug tracking.
- Aid in the development and maintenance of automated test software tools.
- Communicate with developers to improve test design and solve technical issues encountered.
- Aid in the development of schematics, test setups, and test scripts for open loop test bench through Hardware-in-the-Loop (HIL).

Essential Skills

- Advanced understanding of programming languages (C/C++, MATLAB, or Python).
- Highly proficient in embedded C/C++ for ARM based microcontrollers.
- Direct and proficient experience in MATLAB and Simulink.
- Strong controls and software capabilities.
- Discipline in software test and verification methodologies.
- Experience in all phases of the testing cycle including reviews, change control meetings, and project status meetings.
- Competency in Microsoft products including Excel, Word, Project, and PowerPoint.
- Ability to work as a member of a team.
- Excellent verbal and written communication skills.
- Excellent technical, analytical, and problem-solving skills.
- Ability to work autonomously in a fast-paced environment.

Work Environment

The work environment includes working with advanced technologies and equipment, including ARM based microcontrollers, MATLAB, Simulink, and Hardware-in-the-Loop (HIL) setups. The role involves collaborative teamwork and requires excellent communication skills. The environment is fast-paced, and the ability to work autonomously is crucial.