SMIT **PATEL**

Embedded Engineer

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Bangalore, India

SUMMARY

Dedicated and detail-oriented Embedded Engineer with over 3 year of experience in firmware development and testing within high-tech environments. Strong background in low level programming and hardware-software integration. Proficient in multiple programming languages and embedded software solutions, with a proven track record of collaborating with cross-functional teams to define requirements and drive successful project outcomes. Committed to implementing best practices and continuous improvement to deliver superior electronic solutions and automation processes.

EDUCATION

Dharmsinh Desai University

Bachelor of Technology in Electronics and communication [2017-2021]

SKILLS

- C Programming
- C++
- Python
- Embedded C
- Copilot
- Communication Protocols(I2C,SPI,UART)

SOFT SKILLS

- Adaptability
- Problem Solving
- Communication
- Critical Thinking
- Collaboration

CERTIFICATIONS

- Completed Advanced Embedded Systems Training from Vector Institute, Bangalore

LANGUAGE

- English
- Hindi
- Gujarati

PROFESSIONAL EXPERIENCE

Embedded Engineer

TEKSystems | April 2023 - Present

- Collaborated with hardware engineers to define firmware requirements and ensure seamless integration with hardware components.
- Diagnosed and resolved complex firmware issues, leveraging debugging tools such as JTAG and oscilloscopes.
- Add functionality to existing firmware in C / C++ to check electrical functionality of cartridges.
- Identified opportunities for process improvements and implemented best practices in firmware development to enhance efficiency and quality.
- Automate the Qualification process using python script.
- Contribute to design discussion and participate in code reviews.
- Investigate and resolve issues found in development and validation testing.
- Develop detailed test plans and test cases based on firmware specifications and design documents.
- Conducted unit and integration testing to ensure firmware functionality and performance met specifications.
- Developed automated testing frameworks to streamline the validation process and improve test coverage.
- Conduct regression testing to ensure that new code changes do not adversely affect existing functionality.

System Engineer

Tata Consultancy Services| 2021 - 2023

- Design and develop application software in C/C++ for Optical Transport product.
- Design and develop automated tests in python automation framework.
- Contribute to design discussion and participate in code reviews.
- Investigate and resolve issues found in development and validation testing.