



Pavan Kumar H V

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Professional Summary

- Experienced Senior Software Engineer with 3.1 years in Embedded Systems, skilled in Embedded C and Classic AUTOSAR architecture. Hands-on expertise in system integration, SIP integration for the MICROSAR BSW modules, testing and debugging for real-time automotive applications. Proficient in SDLC V-Model and experienced in maintaining software quality, documentation and QMS compliance.

Experience

- Avin Systems Private Limited** Dec 2021 - Jan 2025
Senior Software Engineer

Projects

- Automotive Platform Integration**
 - Executed SIP integration for 20+ MICROSAR SIP modules, ensuring seamless configuration and generated all the modules.
 - Knowledge on Fls, Fee, vMem, vMemAcc, vRomTest memory modules and other modules of MICROSAR.
 - Used DaVinci Configurator, Git, Github, Jira, Vector CANoe testing tool, Bitbucket, Cygwin and MPC567x microcontroller.
- Application Development & Autosar Integration for Steering Wheel ECU**
 - Derived and implemented AUTOSAR application requirements for horn and paddle shifters modules.
 - Developed Paddle Shifters application module and Hardware Abstraction Layer for it.
 - Prepared FMEA and Misra reports, architectural and detailed design documents.
 - Performed qualification, module-level and integration testing on the complete integrated stack, including application layer features and diagnostic modules.
 - Designed and executed comprehensive test scenarios for module-level, qualification, and integration testing, achieving 100% test coverage.
 - Responsible for code reviews, fixing the bugs, interface with the clients, maintaining the QMS guidelines and overseeing the entire project maintenance.
 - Used Dev C++, EA, LDRA, Vector Candb++, MPLab icd4 debugging and flashing tool, Vector CANoe testing tool, xc32, GCC compilers and ATSAMC21G microchip microcontroller board.
- Hardware Abstraction Layer Development**
 - Designed Architectural and Detailed Designs for the implemented code.
 - Created few test cases for the OS module in the Hardware Abstraction Layer on a Linux platform.
 - Used EA tool, codebeamer and citrix workspace.

Skills

- Embedded C
- SIP Integration
- Classic AUTOSAR
- Knowledge on Can bus and other communication protocols
- FMEA and Test Plan Preparation
- Module Configuration and Integration
- Hands-on on debugging tools
- Knowledge on GCC, GHS, xc32 and tasking compilers
- Software Development Life Cycle and Agile methodology
- Automotive SPICE Compliance
- Basic knowledge on RTOS and UDS modules

Tools

- Git
- Tortoise SVN
- Jira
- Codebeamer
- Redmine
- BitBucket
- Confluence
- Enterprise Architect
- Eclipse IDE
- Dev C++
- LDRA
- DaVinci Configurator
- Vector Candb++
- Vector CANoe
- MPLAB X IDE
- NXP S32 DS
- Renesas Cubesuite

Professional Awards

- Recognised as part of the "**Splendid Squad**" award for the project Application Development & Autosar Integration for Steering Wheel ECU.

Education

- **Shree Devi Institute of Technology (VTU)** 2021
Bachelor of Engineering
CGPA: 7.6

Certifications

- **Programming for Embedded Systems**
5Square Technology, Bengaluru