

Vinay Andhavarapu

Embedded Software Engineer with 2+ years of experience in automotive software development. Proficient in designing robust software solutions and delivering high-quality outputs. Seeking challenging opportunities to leverage my expertise and contribute to innovative projects in a dynamic environment.

Work Experience

Software Engineer, *Bosch Global Software Technologies*

Jan 2023 - Feb 2025.

Customer- General Motors.

SW Development Methodology: V-Model.

Location - Coimbatore.

- Worked as **Software Engineer** for the **Engine Control Module (Powertrain)** – **ECU** in **V&V** Flow model.
- Experienced in **C Programming** Language.
- Designed various Model based development using **ASCET**.
- Experienced in **AUTOSAR**-based software integration , including SW adapter development, integration of ASW and BSW components, performing integration testing (**SWE.5**), and delivering software at the PVER level to GM calibration teams.
- Experienced in performing Basic Functional Testing (**BFT**) using HIL test benches to ensure a reset-free software.
- Worked on **hardware configurations, OS scheduling configurations**.
- Implementing Test cases, and performing **Unit Verification tests (UT)** for all interfaces and functions developed in the SWadp module using the **TPT** Tool.
- Created Test Specification and Test cases for different software requirements based on **ASPICE** Process.
- Test Execution & Creation of Test Report based on Release Notes.
- Performed runtime analysis (Static Runtime Measurement) using **GLIWA**.
- Good Knowledge on Autosar Modules like DEM, DCM, NVM etc..
- Analyzed errors and warnings pre-delivery to ensure **MISRA** and **ISO 26262** compliance, resolving critical issues for improved software safety.
- Good experience on reporting the defects and tracking them to closure using bug tracking tools **Jira**.
- Implementation and testing of CAN frame communication between nodes using **CANalyzer**.
- Knowledge on **CAPL scripting** for testing CAN frames.
- Proficient in **Git**, including resolving merge conflicts, troubleshooting errors, and managing version control workflows.
- Performed the test with an Oscilloscope, PICO scope, Function Generator and ETAS devices.
- Good Knowledge on communication protocols like **CAN** ,UART, SPI and I2C.
- Good Knowledge on Unified Diagnostic Services (**UDS**) Protocol.

Educational Background

B.Tech, Electronics and Communication Engineering

KL University - Guntur

Sep 2018 - Oct 2022

- Minor Specilization in Data Computing.

Contact

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📍 Visakhapatnam

Skills

Technical Skills

- Embedded C, Python, CAPL.
- GIT,SDOM
- CAN,SPI,UART,I2C
- Request One, Jira
- HiL Testing - ETAS Labcar

Tools/Software

- AUTOSAR
- INCA
- ASCET
- CANalyzer
- TPT
- ECU-Worx
- UDE

Languages

- English (Fluent)
- Telugu (Fluent)
- Hindi (Proficient)

Certification/Short Courses

- Huawei Certified ICT Associative - Artificial Intelligence
- Introduction to IoT by Cisco Netacad.
- Programming for Everybody (Getting Started with Python)

Additional Information

- Received excellent customer feedback for ensuring on-time software release while managing last-minute changes and updates efficiently.
- Volunteer in NSS.
- Worked as key member in EM Activities.

Declaration

- I hereby declare that the details furnished above are true to the best of my knowledge and belief.