

DHINESH P

Mobile: 9500404973

Email: dhineshpalanisamy12@gmail.com

Coimbatore, India

CARRIER OBJECTIVE

Experienced Embedded Software Engineer with over 3.5 years in automotive software development and testing. Seeking a challenging opportunity to leverage my skills in embedded system, software testing, automation, and debugging to contribute a quality-driven innovation in the automotive domain.

PROFESSIONAL QUALIFICATION

Bosch Global Software Technologies Via UST

Embedded Test Engineer| Software Developer

March 2022 – Present

- Currently Working as an Embedded Test Engineer and Software Developer at Bosch Global Software Technologies (Via UST for Hardware Library in Automotive Steering domain).
- Proficient in analyzing software requirements to develop test strategies, execute test cases and document results to ensure thorough validation and software quality.
- Hands-on experience in automotive software development for electric power steering systems, adhering to V-Model Software Development Life Cycle and ISO 26262 (Functional Safety) standards.
- Strong proficiency in C and Embedded C, with practical experience in developing and debugging on 32-bit Renesas microcontrollers.
- Skilled in translating the customer feature requests into software requirements, software designs, implementations and bug fix through JIRA based workflow.
- Experience in unit, integration and functional testing using tools like Tessy, Lauterbach Trace32, EES (in-house SW testing tool) and CANalyzer.
- Experienced in tools like Enterprise Architect, IBM Rational DOORS, ClearCase, Astree, GIT and JIRA Track & Release operating within Agile frameworks.

PROJECT CONTRIBUTIONS

1.Associate Software Engineer | March 2022 – August 2023

Role: Software Test Engineer

- Performed low level software testing on steering ECUs across multiple platforms.
- Executed BSR and non-automated test planning, validation and execution on load machine (Hardware power-packs) for SCU platform.
- Worked on requirement analysis, test specification creation and review in Doors.
- Root cause analysis of bugs and field issues reported by customer teams in testing.
- Contributed to the entire software testing lifecycle including test planning, test case design, execution, defect reporting and regression testing to ensure software quality throughout the development process,
- Automated test procedures using Python scripts, resulting in a 50% reduction in manual testing effort.

2. Software Engineer | September 2023 – Present

Role: Software Developer

- Designing, developing and integrating embedded software solutions for automotive applications, focusing on sensor integration such as steering angle, steering torque, humidity, and acceleration sensors.
- Utilizing IBM DOORS to translate customer feature requests into structured system requirements, while outlining corresponding design, validation, and testing strategies.
- Working with cross-functional teams to develop steering ECUs and integrate embedded software with hardware, utilizing SPI, SENT and UART interfaces for sensor and actuator communication.
- Responsible for calibration and validation of automotive sensors to optimize system performance and ensure data accuracy.
- Performing safety analysis and developing efficient Embedded C code in adherence to ISO 26262 safety standards.
- Conducting extensive software testing and debugging using JTAG and CANalyzer to ensure compliance with stringent performance and reliability standards.

TECHNICAL SKILLS

- Programming: C, Embedded C, Python, CAPL Scripting
- Microcontrollers: 8051, PIC, Renesas RH850/P1x-C
- Architecture and Design: Enterprise Architecture
- Static Code Analysis: Astree
- Communication Protocols: CAN, UART, RS-232, I2C, SPI
- Testing & Debugging: CANoe, CANalyzer, CANape, Lauterbach Trace32, Tessa
- Version Control: IBM ClearCase, GIT
- Requirements Management: IBM DOORS
- Hardware & PCB Design: Altium Designer, Proteus 8 Professional, LTspice, TINA
- SMT Machine Handling & Soldering: Hands-on experience with SMT and Through-hole soldering

CERTIFICATIONS AND ACHIEVEMENTS

- Certified Software Test Engineer with ISTQB Foundation Level certification
- Rising Star and Shining Star Awards (2022 & 2023)
- Best Performer Award (Hi-5 Award) - Bosch (Q1 2024)

EDUCATIONAL QUALIFICATIONS

B.E - Electronics and Communication Engineering
Sri Shakthi Institute of Engineering & technology | 2017-2021
CGPA - 7.66