

Kurra Sai Naveen Krishna

Email: sainaveenkrishnak@gmail.com | Phone: +91-9182528970

Experience: 3+ Years

Career Objective

To secure a challenging position as an Embedded Software Developer, leveraging my skills in embedded programming and system development to deliver innovative and high-quality solutions.

Professional Summary

- 3.3 years of experience in **Embedded Software Development** with expertise in **Instrument cluster, Infotainment** and **HMI design** by using GDT and CGI tools
- Proficient in **Embedded C programming, C programming, debugging**.
- Skilled in working with protocols such as **UART, I2C, SPI**, and **CAN**.
- Hands-on experience with **RHS850 Microcontroller** and 8/32-bit Microcontroller, including 8051 and **ARM Cortex M3**.
- Expertise in tools such as **CANalyzer, CANoe**, and configuration management systems like **IBM Doors**.
- Requirement Based **Functional testing** (Manual and Automation testing), **Manual Testing** - Using Vector tools like **CANape, CANalyzer** and **Canoe**.
- Good Experience on **Unit Testing** using **Vector CAST, Tessa** tool.
- Experienced in **Requirement Analysis, MISRA, RTOS**.
- Having experience on **Configuration management tools** like IBM RTC, GitHub, Jira.
- Proficient in applying and fixing **MISRA C** guidelines for ensuring compliance with industry safety standards.
- Having knowledge on **HIL Testing** and **CAPL** scripting.
- Strong communication skills and team coordination with the ability to adapt to evolving environments.
- Experience in low level device drive like SPI & I2C.

Professional Experience

- Currently worked as **Senior Engineer** with **L&T Technology Services**, Bangalore from October 2022 - October 2024.
- Previously worked as **Engineer** with **Jesvid Cryo Technologies Pvt. Ltd**, Guntur from January 2021 - September 2022.

Technical Skills

- Programming Languages : C, Embedded C.
- Microcontrollers : RHS850, ARM Cortex M3, LPC 1343.
- IDE : IAR Workbench, Keil, Notepad++, Visual Studio.
- Protocols : I2C, SPI, CAN.

- Tools : CANalyzer, CANoe, Vector Cast, Renesas E1 Debugger, Lauterbach Trace32, IBM Dorrs.
- Testing Tools : LabCar, HIL, Cantata, CAPL, Car Play Certification Testing, Telematic Testing.
- Operating Systems : Linux, ROTS(TN Kernel and DI kernel).
- Configuration Management: IBM RTC, Gitub, Jira.
- Code Standards : MISRA C, Static code analysis tool (QAC).

Educational Qualification

- B.Tech – Kallam Harinatha Reddy College, Guntur (AP), 2017.
- Intermediate – Sri Chaitanya Junior College, Guntur (AP), 2013.

Projects Summary

Driver Information – VW Infotainment & Instrument Cluster

Project Description:

This program is all about Testing Infotainment features for the VW complete the certification process for both android and Apple.

Tools: PTC, Car Play Certification Testing, Telematic Testing, IBM DOORS, SPI.

Responsibilities:

- Cover all the PTC-related tasks.
- Implement in **low level device drive** like **SPI**.
- Cover all the Apple certification tasks.
- Take related logs and observe issues.
- Conduct automated **unit testing** using **Vector Cast**.
- Perform automated **functional testing**.
- **Fix bugs** in the existing software.

HMI Instrumentation Cluster Development

Project Description:

Instrument Cluster development. Implemented different features like Trip Computer, Mini Popup, Warnings, Footer, Header, Telltales and Menu Relatives.

Tools : Eclipse, CANalyzer, Vector Cast, Renesas E1 Debugger, I2C.

Responsibilities:

- Implemented features like Trip Computer, Warnings, Telltales, and Menu Relatives.
- Conducted **functional testing** and **static analysis** using QAC and Coverity.
- Debugged and resolved software bugs.
- Applied **MISRA C** guidelines and resolved violations to ensure compliance with industry standards.

- Do the Automated **unit testing** of my written code using **VCAST**.
- Implement in **low level device drive** like **I2C**.

Geely Lotus IBC-Fault Injection Technique and Testing

Project Description:

The project involves injecting the fault into the system and observing system behavior, whether DTC has been logged in the system. The faults are injected using white box and black box procedure. After injecting the faults, the system is retrieved back to normal operation.

Tools : Canape, CANalyzer, Canoe, Tasking Tricore, PTC Integrity, IBM DOORS, Trace 32,CAN.

Responsibilities:

- Responsible for code modifications and generation of Hex-Files.
- Flashing hex files and setting the system fault-free.
- Injecting faults using MxV-DEV and generating reports.
- Handled thermal management, bridge driver, and electric drive for the EPS system.
- Flashing the SW (S19) in the ECU MQB ESC.
- Loading ELF and configuring A2L in the CANape.
- **Unit Testing** do the Automated unit testing of my written code using **Tessy tool**.

Declaration

I hereby declare that the above information is true to the best of my knowledge.

Place: Bangalore

Signature: [Sai Naveen Krishna]