

ARJUN C

BTech | Bengaluru IN | +91 9611736326 | arjunchandra3657@gmail.com

SUMMARY

Results-driven Embedded Software Engineer with 3.5 years of experience in embedded product development. Seeking a challenging Embedded Engineer opportunity where technical acumen in low-level programming, real-time operating systems (RTOS), and hardware-software integration will contribute directly to organizational success.

WORK EXPERIENCE

Technical Skills

- Programming Languages: Embedded C, C, Python
- Development Tools: VS Code, STM32CubeIDE
- Debugging & Analysis Tools: Logic Analyzer, RTT Viewer, JTAG
- Communication Protocols: I2C, SPI, CAN, UART, BLE
- RTOS: Free RTOS, Zephyr

Vinnovations LLP

Bengaluru, Karnataka

Senior Embedded Software Engineer (1year 8months)

Dec 2024 to Till

Project: WEARABLE PPG DEVICE AND ACTIVITY MONITORING (version1 and version 2)

- The project involves a portable PPG monitoring device, designed to operate with inbuilt rechargeable batteries.
- Device acquires PPG data recorded on a patient and transmits the acquired PPG data over a secure BLE to a smartphone app for display, analysis and storage.
- Firmware Application running on the board records the sensor data, packetizes the data and sends this data to an Android App

Role:

- Analyzed requirements and prepared software specifications for the project based on zephyr operating system.
- Designed and developed Flash memory module for embedded applications. Implemented Flash operations including write, read, and sector erase.
- Worked on the design and development of Monitor thread.
- Developed the MAX86174 PPG sensor driver using Zephyr RTOS.
- Implemented I²C-based register read/write APIs, FIFO data acquisition, interrupt processing, and sensor configuration.
- Integrated the driver with the application layer for real-time PPG data collection and processing
- Worked on the C-Script to calculate packet loss, find the missing packets and request to resend the missing packets.
- Worked on BMI 270 Module for the implementation of interrupt-driven wake-up mechanism using BMI270 sensor, replacing inefficient polling method.
- Conducted end-to-end testing of a wearable (watch) device, covering functionality, performance, and reliability.

- Analyzed and fixed bugs and issues reported by clients to improve system stability.
- Leveraged logic analyzers and oscilloscopes to debug complex I2C/SPI issues.
- Developed firmware following **MISRA C** standards and **process-driven** methodologies to ensure reliability in safety-critical applications.
- Advanced Technical Documentation, Cross-functional Collaboration with hardware/QA teams, and Resource Optimization for low-power embedded systems.
- Regular interaction with Client for project progress and deliverables.

APTIV Automotive (TCL)

Bengaluru, Karnataka

Trainee Engineer

February 2023 to Dec 2023

Project: IHP (IVECO Heavy-Duty Platform)

- Implemented communication features and CAN message handling for IVECO ECUs based on the **AUTOSAR** architecture.
- Performed requirement analysis and feature implementation based on OEM specifications.
- Configured AUTOSAR COM Stack and integrated DBC files for CAN communication.
- Created and mapped ports between Software Components (SWCs)
- Conducted Unit Testing and Integration Testing to verify communication functionality.
- Performed debugging, root cause analysis, and issue resolution for reported defects
- Tools: Vector DaVinci Configurator, Vector CANoe, Renesas Debugger, Jira.

Vishishth Technologies

Bengaluru, Karnataka

Embedded Engineer

Jan 2022 to Jan 2023

Project:

Automotive Power Seat with Memory function Description:

Developed embedded software for memory seat integration in automobiles to enhancing user comfort, by seamless integration of seat position sensors, motor actuators, and memory storage.

Role:

- Development of software to get input from user interface to position the automotive seat.
- Development of software to store and retrieve seat position to EEPROM.
- Development of software for I2C to interact with EEPROM.
- Implement the write and read code for the I2C code.
- Unit test of all the above modules and device drivers.
- Prepared technical documentation and test reports

EDUCATION

- 2025** DEVICE DRIVER DEVELOPMENT TRAINING: Kernal Masters, Hyderabad
- 2019** B. Tech IN ELECTRONICS AND COMMUNICATION ENGINEERING:
Musaliar College Of Engineering and Technology, Pathanamthitta, Kerala 7.77 (CGPA)
- 2015** HIGHER SECONDARY: Sree Narayana Public School, Konni, Kerala, 80%
- 2013** CBSE: Sree Narayana Public School, Konni, Kerala, Kerala, 98%

PERSONAL DETAILS

Nationality : Indian

D.O.B : 3rd May 1997

Marital Status : Unmarried

Current address : Tavarekere, BTM Layout, Bengaluru

Languages : English, Malayalam, Hindi

DECLARATION

I hereby declare that the above particulars of facts and information stated are true, correct and complete to the best of my belief and knowledge.

Place: Bengaluru

Name: Arjun C