

## Debasmita Ghosh

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### Career Summary

Seeking an opportunity to work as an embedded software engineer in an innovative and fast growing organization to utilize my skills and experience

### PROFESSIONAL SUMMARY

- 4.2 Years of experience as an Embedded Software Engineer
- Experienced with all stages of the Software Development Life Cycle for Automotive and IoT projects
- Model based design and development using ASCET tool for Auto Code generation
- Experience in Software integration and Functional testing of Engine control units

### Technical Skills

- *Programming Language* : **C, Embedded C**
- *Operating Systems* : *Windows, Linux(Ubuntu), FreeRTOS*
- *Microcontrollers* : *8051, STM32, STM8, ESP32*
- *Communication Protocols* : *UART, I2C, SPI, CAN*
- *IDE* : *Ecu Worx (Eclipse), Keil uVision5, STM32Cube, VS Code*
- *Tools Used* : *Logic Analyzer, Digital Multimeter, CRO*
- *Debugger* : *UDE, ESP-Prog*
- *Version Control Tools* : *IPE, SDOM, Github, SVN*
- *Testing Tools* : *INCA, ECU test, Test runner*
- *Others* : *Device Driver Development, UDS, Data Structures, GPIO, RTC Timers, ADC, Assembly Language*

### EXPERIENCE SUMMARY

- **Senior Software Engineer** in **Quest Global, Bangalore** from **August 2023** to till now
- **Embedded Software Engineer** in **Larsen & Toubro Technology Services Limited, Bangalore** from **November 2021 to July 2023**
- **Firmware developer** in **Evergreen Techno Solutions Pvt Ltd, Bhubaneswar** from **October 2017 to March 2019**

### ACADEMIC SUMMARY

Bachelor of Technology in Electronics & Telecommunication Engineering from Seemanta Engineering College affiliated to BPUT Odisha

### PROJECT DETAILS

#### **Project-1**

**Name** : **Electric Vehicle Supply Equipment (EVSE)**  
**Tools** : VS Code, ESP-Prog

#### **Roles & Responsibilities**

- Writing code in application and service layer
- Writing code for ESP32 and Energy meter(AT90E32AS) interfacing using SPI
- Requirements gathering and analyzing
- Understanding the technical and functional specifications
- Preparing high level design documentation and flowchart

## Project-2

**Name** : Integration and testing of Engine Control Unit

**Tools** : ASCET, EcuWorx, ETAS LABCAR, UDE, ECU TEST TOOL, INCA, DIAGRA

### Roles & Responsibilities

- Requirements gathering and analyzing
- Understanding the technical and functional specifications
- Planning and coordination of software integration based on estimation of function development, ensuring synchronization between customer and function development teams for basic components availability
- Manual system level testing and automated HIL(model based) testing using ECU test tool for basic functionality checks, on-board diagnostic check with Diagra and UDE
- Test reports generation and assessment for the quality assurance
- Preparing documentation for QA approval and customer delivery letter
- Performed process of integration and pre delivery checks for customer deliverables

## Project-3

**Name** : SMS Alerter

**Tools** : C programming, *STM32Cube*, *Logic Analyzer*

### **Description**

SMS Alerter enables you to get advance notifications through SMS to avoid major breakdowns. It is fully secured and remote controlled and update through SMS commands. It has the ability to send messages to multiple recipients.

### Roles & Responsibilities

- Developed drivers for UART peripheral.
- Gathering requirements, Debugging, and testing.
- Detecting and fixing issues