**Gowtham S**

E-Mail: [gowthaman2411@gmail.com](mailto:gowthaman2411@gmail.com)

Mobile: +91 8883032929

**PROFESSIONAL SUMMARY:**

* 8 Years of embedded software development experience spanning from designing, coding, and unit-testing of applications in automotive domain
* Experience in developing Embedded based Applications involving C
* Experience in developing Embedded based Bootloader software involving C for Application Flash.
* Extensive experience in AUTOSAR (COM, DCM, DEM, and Software Component), integration and Testing.
* Experience in using AUTOSAR configuration and generation tools like Vector Davinci
* Experience in Debugging Skills and using tools like S32 Design Studio and other tools.
* Working on Implementing functionalities (State Machine for the Application Layer).
* DID and PID implementation using Vector Tools
* Contrived the requirement documents from the scratch from the VOC of customers/clients
* Project Estimation comprising the due diligence report of the existing product.

## Technical Skills

|  |  |
| --- | --- |
| Operating Systems | Linux and Windows |
| Programming Languages | Embedded C |
| Scripting Languages | CAPL |
| Protocols | CAN, UDS, ISO 15765-2, ISO 26262-Part6 |
| Tools | GCC, make, SmartGit repository, Candela Studio, CANalyzer, CANoe, Code warrior, Cosmic, VectorGeny, Davinci Configurator, Davinci Developer, Vector Vflash, Canoe Diva, S32K Design Studio, NXP Open Bus Configurator, DevSuite, Winidea, AEE-Pro and Re-programming Tools |
| Debuggers and Controllers | GDB, True-time simulator & Real-time Debugger, ZAP Debugger, S32K146 Controller, S12 controller. |

**Experience Summary:**

* Company: GlobalEdge Software Limited
* Role: Module Lead
* Duration: Dec 2016 to Present

**Educational Details:**

* B. Tech from Karpagam College of Engineering, Coimbatore in 2016

**Project Details:**

## Project 1:

**Title:** Functional Safety- Product Development at Software Level

**Tools:** NA

**Programming Language:** NA

**Duration:** May’2022 till now

**Description:** Preparing checklist for Product development at software level to ensure the compliance of Functional Safety (ISO 26262- Part 6).

**Roles and Responsibilities:**

## Prepared Checklist at every phase of Product development at software level

## Preparing Safety goal requirement

## Preparing Traceability matrix from Requirement to Design and testing

## Project 2:

**Title:** Bootloader Development

**Tools:** Winidea, AEE-Pro, CANalyzer/Canoe, Reprogramming tools

**Programming Language:** Embedded C

**Duration:** Dec’2022 to Mar’2024

**Description:** This software used to re-programming the Application and Calibration data for new update of Functionality. Also, this software will validate the Valid Application and necessary check to make sure the Software is in well-Shaped.

**Roles and Responsibilities:**

## Bootloader Jump logic implementation.

## DID implementation.

## BCT configuration for COM module

## Re-programming sequence implementation include all necessary services.

## Re-programming testing

## Project 3:

**Title:** Power Step System Module

**Tools:** NXP S32 Design Studio, VectorGeny, NXP Open Bus andCANalyzer/CANoe

**Programming Language:** Embedded C

**Duration:** Sep’2019 to Nov’2022

**Description:** This Module comprises ARB feature; which is used in higher end SUVs, to assist user with stepper - board retraction/deployment; whenever door closes/open due to the higher ground clearance of SUVs.

**Roles and Responsibilities:**

* Project handling
* Hybrid Configuration for Different Program
* State Machine implementation for the Application Layer.
* DIDs and PID implementation.
* Code Integration.
* Unit testing.
* Bug Fixing.
* DID implementation/testing on bootloader.
* Panel Design

## Project 4:

## Title: Running Board Module

## Tools: Davinci Developer, Davinci Configurator, Cosmic compiler, ZAP Debugger and CANalyzer/CANoe

## Programming Language: Embedded C

## Duration: Sep’2017 to Dec’2019

**Description** This Module comprises ARB feature; which is used in higher end SUVs, to assist user with stepper - board retraction/deployment; whenever door closes/open due to the higher ground clearance of SUVs.

**Roles and Responsibilities:**

* Project Handling.
* AUTOSAR configuration from scratch.
* Application State Machine implementation and Full Application Functionality
* Candela Diagnostic Description file configuration for the Module
* DIDs, PIDs and DTCs implementation using DCM and DEM module.
* EEPROM Corruption Handling Implementation.
* COM Service module configuration.
* Software Component Implementation.
* Code Integration and unit testing.

## Project 5:

## Title: Illumination Power Running Board Module

## Tools: VectorGeny, CodeWarrior compiler, Real-time Debugger and CANalyzer/CANoe

## Programming Language: Embedded C

## Duration: Dec’2016 to July’2017

**Description:** This Module comprises ARB feature; which is used in higher end SUVs, to assist user with stepper - board retraction/deployment; whenever door closes/open due to the higher ground clearance of SUVs.

**Roles and Responsibilities:**

* CAN communication configuration using VECTOR Geny.
* Candela Diagnostic Description file configuration for the Module.
* DIDs, PIDs and DTC logic implementation.
* Code Integration
* Application logic and State Machine implementation.
* Unit testing.
* Bug fixing.
* Functional Testing.
* Diagnostic Testing (OEM Tools)
* CAPL and Panel Design

## Trainings

|  |  |
| --- | --- |
| **Trainings Attended** | **GESL Training Program** |
| Duration | 6 Months |
| Topics | **Automotive Specific**:   * CAN Protocol, Unified Diagnostic Services. * ISO 15765-2 * Knowledge on AUTOSAR Basics (Three layered architecture). * C and Data Structure * Linux Concepts (Threads, IPC and Semaphore). * Knowledge on Networking Concepts (TCP, UDS, and Packet flow)   **Personality Development**:   * Self-Awareness * Communication Skill * Teamwork * Office Etiquette * Customer Orientation * Learning And Innovation |

## Personal Profile

|  |  |
| --- | --- |
| Name | Gowtham S |
| Date of birth | 24/11/1994 |
| Gender | Male |
| Address | 7/60.3, Sekkangadu, Elachipalayam, Tiruchengodu, Namakkal – 637202 |