**DILEEP VENKATA SUBRAHMANYAM TUMU**

Mobile: (+91)9346819449 Email: dileepvenkata.tumu@gmail.com

**PROFILE**

Having 2+ years of experience in Embedded Software development and Automation testing. I am a self-motivated professional who believes in being proactive and efficient in all my deliverable. Along with strong communication skills, I am also a team player with an analytical mind bent towards problem-solving and delivering solutions.

**IT EXPERIENCE | SNAPSHOT**

 Expertise in **AUTOSAR application** development and having **Basic theoretical knowledge in RTE, Basic Software and MCAL layers**.

 Experience in developing the Reverse Camera **ADAS** features using AUTOSAR Methodology and Embedded C programming language.

 Having good Experience of working with **CAN, SPI and UART protocols** and basics of **Ethernet, I2C.**

 Worked on Code detail design using Enterprise Architecture tool.

 Worked on code warnings fix according to the **MISRA coding guidelines** using QAC.

 Having good Experience in working of automating the **unit testing, qualification testing and .hex files flashing using python**.

 Taken the complete ownership of **GPEP products** and always delivered the products to the customer on-time.

 Good Experience in regular weekly project status meetings to discuss the risks involved in ongoing projects with Teammates and Customer.

 Good at multitasking and working well under tight deadlines with high efficiency.

 Ability to work in both independent and team environment.

**TECHNICAL SKILLS**

 Operating systems : Windows 10,11 and Linux(UBUNTU)

 Technologies : Embedded C, C++ , AUTOSAR, Python and basics of C#

Embedded controllers **:** ESP32, GW5200, ARM Cortex-A53

 Software tools : **Xtensa 32-bit**, Canoe, Davinci Developer, Davinci- - Configurator, **Trace32**, EnterPrise Architecture

 Protocols **:** CAN, UDS, SPI, UART and ETHERNET

 **Debuggers : Flyswatter, Lautherbach**

**EDUCATIONAL QUALIFICATIONS**

 Bachelor of Technology from BVC Engineering College, Batlapalem(2022) With **77%**

 Intermediate from Aditya Junior College, Mandapeta(2018) With **95%**

 Secondary Education from ZPP High School, Lolla(2016) With **90%**

**ACHIEVEMENTS**

 Certified in **C programming.**

 Got **TheHighFlyer** award for being good contributor in the team.

 Got **TheDistingishContributor** award for being proactive in all tasks and understanding the customer process.

**EMPLOYMENT**

 Working as a Software Engineer in **KPIT** (Sep-2022 to Till Date).

**PROJECT SUMMARY**

**Project-1 :**

**Project :** Reverse Aid Development

**Technologies :**  Embedded C, ADAS, AUTOSAR, Camera

**Development Tools :** Xtensa Xplorer, Enterprise Architecture, PTC Integrity, Code-

-Collaborator, Davinci Developer, Davinci Configurator

**Automotive Testing Tool :** Canoe, Flyswatter Debugger, Vectorcast

**Operating System :** Windows 10

**Microcontroller :** GW5200

**Description :**

An AUTOSAR Camera application development project for Toyota OEM to assist the driver while parking by including HMI guidelines, sonar, voice recognition, washer cleaner and RCTA features.

**Roles and Responsibilities:**

 Understanding Software Requirement Specifications and identifying the required points to develop the software

 Taken the **RCTA(Rare Cross Traffic Alert)** feature ownership and implemented the code for that using C-language and created the functional test cases to test the functionality

 Having experience in **DBC and CDD** files Update and integration to AUTOSAR workspace

 Have good knowledge in diagnostics and aiming features

 HMI features implementation for multiple vehicle variants using AUTOSAR ports and interfaces

 Taken the complete responsibility for **GPEP** products(Unit testing, Integration Testing, QAC, CPU load test, Smoke Test) in the project.

**Project-2 :**

**Project :** Driver Monitoring System

**Operating System :** Linux(Ubuntu), Windows 10

**Technologies :** C++, Python 3.12

**Development Tools :**  VS Code

**Debugger :** Lautherbach (Trace 32)

**Automotive Testing Tool :** Saleae Logic analyzer and Trace32

**MicroController** : ARMCortex (A53)

**Roles and Responsibilities:**

 In this I worked as a Software Developer for building the logic for execution of the test cases.

 For Saleae and TRACE32 went through the online references and related documents and gathered all the required information to implement the code.

 Implemented the **Server and Client communication using python ZMQ module**( In this python code acts as Client and C++ software acts as Server). By using **this code we can modify the variables present in C++ at runtime.**

 Once code implementation completed I have tested all the functionality and gave to the customer.

**Project-3 :**

**Project :** Qualcomm - Lateral Support System

**Operating System :** Linux(Ubuntu), Windows 11

**Technologies :** C++, Python 3.12, GitHub, Code Beamer, grafana, AWS-S3

**Development Tools :**  VS Code, Fox-glove, LitchBlick

**Roles and Responsibilities:**

 Here I worked on the reprocessing of software based on the software requirements.

 Also I have created new Defects while debugging the C++ software

 Automated the process of filtering duplicate sessions from old data to new data using python.

**PERSONAL DETAILS**

Gender : Male

Date of Birth : 05-12-2001

Location : Bengaluru

Nationality : Indian

Languages Known : English & Telugu

Marital Status : Unmarried

**DECLARATION**

I hereby declare that all the details furnished above are true and correct to the best of my knowledge and belief.

Place: Bengaluru (Dileep Tumu)

Date : 01-02-2025