

## D Anil (Immediate Joiner)

Software Engineer I

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### Professional Snapshots:

- Having around 2 years of experience in Automotive embedded developer
- Strong knowledge on C Programming language.
- Having strong knowledge on OOPs
- Having good understanding of interrupt mechanisms.
- Strong in Data Structures (Linked list).
- Good Knowledge on FreeRTOS.
- Having good knowledge on C++
- Having good knowledge on Multithreading
- Good knowledge on embedded code bug fix.
- Good knowledge in Debugging skills.
- Good Knowledge on UART, I2C, CAN, SPI, A2B protocols.
- Having good knowledge on TCP, UDP
- Good knowledge on linux
- Soft knowledge in bug analysis and finding root cause for embedded issues.
- Having good knowledge on solving and Troubleshooting Issues.
- Good knowledge on bug life cycle.
- Having good knowledge on Agile and waterfall methods
- Soft Knowledge on fixing build errors and code implementation related to the bug.
- Knowledge on Git version control system.
- Knowledge on Python Scripting and automation.
- Handling reviews of artefacts produced by the team and competency development of the team.
- Problem-solving skills.

### Technical Skills:

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| <b>Languages</b>                       | : C, Python, Data Structures (LinkedList), Embedded C, C++, FreeRTOS, PyQt5, Linux       |
| <b>Protocols</b>                       | : A2B, I2C, UART, SPI, CAN   |
| <b>Microcontroller</b>                 | : LPC1114 with arm cortex M0 processor   |
| <b>Code Management</b>                 | : Git, Gerrit.   |
| <b>Software Products</b>               | : Visual Studio, Cross Core Embedded Studio  |
| <b>System Environment</b>              | : Windows, ubuntu  |
| <b>Other Tools &amp; Methodologies</b> | : Analyzer Application, Sigma Studio and Sigma Studio Plus, Logic Analyzer, STM Cube ID. |

### Professional Experience:

- Working as a **Software Engineer I** at **Cientra TechSolution Pvt.Ltd**, Bangalore.
- Worked as a software engineer in Reliance.

### Achievements:

- Received client appreciation Certificate for solving critical issues.
- Received Appreciation for Game Development Hackathon.

### Internship:

- Completed internship as a Software engineer with Wipro Company.
- Completed Internship with HIEE as Automotive Engineer.

## Certification:

- Completed Advance course in embedded systems at TeamBits institute.  
Covering : C, Embedded C, RTOS, unit testing  
Duration : August 2023 -February 2024
- C# game development hackathon
- Electrical Power Systems
- SQL for Data Science
- AZ-900: Microsoft Azure Fundamentals

## Educational Qualification:

**B. Tech (ECE) from JNTUH University, with an arrogate of 85% in 2022.**

## Project 1

**Project Title : ADI A2B Analyzer**

**Role : Development, Debugging, fixing Issues.**

### Responsibilities:

- Working along with the client to achieve their specific requirements.
- Working on the ADI A2B Project, specializing in simulating and resolving issues with the A2B stack for 242x and 243x transceivers.
- Developed the Python code for configuring Opto Branch nodes and monitoring continuously to reconfigure when nodes get disconnected.
- Developed Python scripts for automating test cases which significantly enhanced product functionality and contributed to development goals.

## Project 2

**Project Title : Automotive Audio Bus & Embedded Software Testing**

**Role : Development, Debugging, fixing Issues.**

**Software : Visual Studio, SigmaStudio and SigmaStudio+, CrossCore Embedded Studio**

### Responsibilities:

- Worked on A2B projects, development and bug fixes, Unit testing, verification and validation, Updating Automated Test cases, stack debugging and error fixing.
- Addressed technical issues with AD242x and AD243x transceivers.
- Hands on experience with SHARC core processor
- Working on the A2B Project, specializing in simulating and resolving issues with the A2B stack for 242x and 243x transceivers.
- Developed python scripts for Automated test cases which enhances the product quality.
- Implemented Unit testing for Firmware.

### Project 3

**Project Title** : Software development for Power / Current Measurement Cradle.

**Role** : Development

**Software** : Visual Studio

**Responsibilities:**

- Developed a desktop application in Python and PyQt5, integrated with TWS Cradle hardware to display real-time data on interactive Matplotlib graphs.
- Designed a user-friendly GUI for effective data visualization, supporting real-time interaction and dynamic updates.

### Project 4

**Project Title** : Integrated Analog and Digital I/O Control System with Real-Time Monitoring

**Role** : Debugging, Embedded C development and Unit Testing.

**Software** : Visual Studio

**Responsibilities:**

- Developed a system for analog and digital I/O measurement and control using the MIO hardware board and FreeRTOS for task management.
- Implemented ADC-based analog measurements for POT and LM35 sensors, with 10-bit resolution and real-time display.
- Managed discrete I/O control of RGB LED, buzzer, and 5 user keys, with FreeRTOS task scheduling.
- Developed I2C-based communication for EEPROM read/write operations (ATMEL 24C08).
- Controlled SPI-based DAC (MCP4911) for output voltage adjustment.
- Implemented CAN protocol for inter-device communication across multiple MIO boards.

### Project 5

**Project Title** : 5G Telecom

**Role** : Developing C++ code and python code

**Software** : Visual Studio

**Responsibilities:**

- Aggregator is developed using python code and UE is developed using C++ code
- Aggregator fetches the IOT address from the IOT devices and stores it into the data base
- Through UE the details of the IOT devices are sent to the 5G core.