



# ADNAN SHIBI

EMBEDDED ENGINEER

## CONTACT

+91-7887838957

Adnanshibi4@gmail.com

## INTRODUCTION

Embedded Software Engineer with 6+ years of Experience in Embedded Software Development. currently working as Tech Lead (Embedded Development) for LTTS.

## HIGHLIGHTS

- Worked on projects from Requirements to Delivery for **AUTOSAR** based development.
- Strong programming skills in C and **EMBEDDED C**, Worked on **Low Level Drivers** for ARM Cortex M.
- Developed Flash Drivers with QSPI in **MCAL** layer.
- Good understanding of RTOS.
- Worked on Autosar classic CDD "EAP-TLS Supplicant" which was deployed on Zonals on Ford's FNV4 gateway module for Automotive **Cybersecurity**.
- Setup development & testing environment using linux dockers.
- Worked on Unit, Integration & Functional testing.
- Worked on **Davinci** configurator, **CANoe**, and **VTT** platform for develop and debug with Vector stack.
- Worked on Automotive tools and followed the **ASPIICE** practices and Delivery.
- Worked on Modeling of Autosar SW Architecture in AUTOSAR Tools.
- Worked in **Agile** environment, familiar with **JIRA** and other Agile process, **SDLC**.
- Experience working on **J1939** Communication protocol, worked on hardware level and application level of Extended CAN. Good understanding of PGN, SPN, Reading, Writing of SPN, Analyzing J1939 Extended CAN traces J1939 **Diagnostics**.
- Experience in driver level development of **protocols QSPI**, SPI, I2C, UART and GPIO.

## EXPERIENCE

### TECH LEAD (EMBEDDED DEVELOPER) - SEP 2023 TO JULY 2025

LTTS - Hyderabad (Remote)

Project- FORD MOTORS (USA)

#### Job Responsibilities:-

- Worked on Autosar classic CDD "EAP-TLS Supplicant".
- Implemented EAP Layer (RFC 5216) lower Eapol layer (IEEE 802.1X-2020).
- Implemented Stand Alone EAP & PACP Supplicant State machine (RFC 4137).
- Integrated open-source MbedTls library which is used for managing TLS layer.
- Implemented PACP, Logon (IEEE 802.1X2020).
- Implemented Crypto Wrapper for crypto operations used in EAP-TLS handshake using Autosar crypto stack.
- Configured & integrated KeyM module for management of certificates used in EAP-TLS handshake
- Conducted Unit testing, static analysis using polyspace, sonarqube for SW quality. Supported functional testing for functional coverage robustness.
- Developed target-based python scripts for functional testing in Ford's fordsim environment.
- Setup development & testing environment using linux dockers & openvswitch (virtual switch) along with wpa supplicant which was used as EAP-TLS client.

## EMBEDDED SOFTWARE ENGINEER - APRIL 2022 TO SEP 2023

WIPRO - Hyderabad (Remote)

Project- AUTOSAR MCAL Layer Driver Development– MARVELL

### Job Responsibilities:-

- To work on **AUTOSAR** Requirements, Analyze and Understand implications of Requirements for MCAL Layer.
  - Modelling of AUTOSAR SW Architecture in AUTOSAR tools like Enterprise Architecture (EA), **POLARION**.
  - Code implementation with respect to requirements and Architecture.
  - To write Test cases and perform Unit, Integration and Qualification testing .
  - To Perform Debugging on **LAUTERBACH**.
  - To maintain documentation and linking of each element in **Polarion** Tool.
  - Resolving Polyspace defects with compliance of standards like **MISRA C, CERT C, Cyclomatic complexity**.
- 

## EMBEDDED SOFTWARE DEVELOPER - APRIL 2021 TO APRIL 2022

ISHTTAA TECH CRAFT – Bangalore (Remote)

Project- Automotive Refrigeration Control system for Refrigerated Trailer (Thermo King) – TRANE Technologies

### Job Responsibilities:-

- Involved in Software Development activity like Requirement investigation, Application Development, hardware interfacing, CAN traces analyzing, Debugging ,unit testing and Build release.
  - Responsible for handling **I/O modules**, maintain code for I/O modules, Code changes as per the requirements, adding new functionalities in code.(languages used **embedded C & Embedded C++**).
  - **Analyzing (J1939)** CAN traces with CAN utility (**PEAK** systems) on **PCAN-view**(viewer of CAN Comm on PCAN HW).
  - Working closely with hardware, perform Analyzing and Debugging Tasks.
  - SAE J1939 **Diagnostic** Message(DM) handling, integrating Alarms, developing program logic for Alarms and DM messages.
- 

## EMBEDDED SOFTWARE ENGINEER – DEC 2018 TO APRIL 2021

VENGAI SOFTWARE SOLUTIONS – Hyderabad

Project- TPMS (Tire Pressure Monitoring System) trigger

### Job Responsibilities:-

- Worked on project designed with STM32 ARM cortex M4, required interfacing with OLED Display, Keypad, RF receiver (433 MHZ) over SPI.
  - Configuration and programming of low level Drivers for SPI and API development.
  - Application programming.
  - Worked on communication protocols like SPI/UART/I2C.
- 

## FIBER OPTICS ENGINEER – DEC 2015 TO DEC 2018

TELECOM CONSULTANTS INDIA LTD (TCIL) – Gulf

Project- Fiberoptics Maintenance project

### Job Responsibilities:-

- Operation and maintenance of Fiber Optics network.

## EDUCATION

BACHELOR OF ENGINEERING - 2010 TO 2013  
UNIVERSITY OF PUNE - PUNE

Earned Bachelor of engineering In **Electronics** with **First Class**.

TECHNICAL DIPLOMA – 2007 TO 2010  
STATE BOARD OF TECHNICAL EDUCATION - NANDED

Pursued Diploma In **Electronics and Telecommunication** with Distinction.

---

## PRODUCTS HANDLED (Applications)

- VTT (Virtual Target Test)
  - Enterprise Architecture (EA)
  - Polarion
  - VECTOR Davinci Configurator
  - Polyspace
  - LauterBache
  - PCAN-view
  - CANoe
  - Surround SCM, Git
  - PuTTY
  - Meld
- 

## PERSONAL DETAILS

Father's Name: Farooq Shibibi

Marital Status: Married

Permanent Address: 2nd floor, Zaidan Apartment, Chaitanya Nagar, Nanded. 431605, Maharashtra.

---