

Neeli Ajay  **Featured**

Software Engineer seeking roles in Software Development, IT Project Management, Requirement Gathering, Solution Designing, Software Design, C, C++, C#, Python, Java, Assembly, Shell Script, SVN, GIT, Bugzilla, TCP/IP, ColIDE, Eclipse, Keil uVision

Current Designation: Software Engineer

Total Experience: 4 Year(s) 3 Month(s)

Current Company: Danlaw Technologies India Limited

Notice Period: 3 Months

Current Location: Hyderabad / Secunderabad

Highest Degree: B.Tech/B.E.
[Electronics/Telecommunication]

Pref. Location: Hyderabad

Functional Area: IT Software - Application Programming / Maintenance

Role: Software Developer

Industry: IT-Software/Software Services

Marital Status: Single/unmarried

Key Skills: Software Engineer, Software Developer, Software Development, IT Project Management, Requirement Gathering, Solution Designing, Software Design, C, C++, C#, Python, Java, Assembly, Shell Script, SVN, GIT, Bugzilla, TCP/IP, ColIDE, Eclipse, Keil uVision

Verified : Phone Number | Email - id

Last Active: 22-Jan-21

Last Modified: 22-Jan-21

Summary

Having 4+ years of experience in design and development of embedded software
Good experience using C language on RTOS based systems
Good experience on working with 32 bit ARM microcontrollers
Good experience on communication protocols CAN, UART, TCP/IP, SPI, I2C
Good experience on developing BLE, USB, CAN ISOTP, UDS, WIFI, TCP/IP stack for various microcontrollers
Good experience in software design, development of C#, .Net Windows Form applications
Good knowledge on Visual Studio, worked with .Net framework 4.0, 4.5
Good experience in design, developing automated test tool for embedded software testing using C#, Python, C++, C
Good experience in developing API in C, C++ and preparing interface classes for C#, .net applications
Good experience on working with GPS modules
Good experience on working with sensors using ADC, LCD
Good experience on working with GSM, LTE modules

Work Experience

Danlaw Technologies India Limited as Software Engineer

Oct 2016 to Till Date

Project

TCU

Company

Danlaw Technologies India Limited

Client

Ashok Leyland

Microcontrollers

NXP S32K144, Quectel EC25, Nordic NRF52832

Duration

Oct 2018 to Dec 2019

Description

TCU is Telematics Control Unit which is used as a Vehicle ECU in Ashok Leylands BS6 vehicles. It is used to log Vehicle CAN Bus data.

It is used to generate custom alerts based on the CAN Bus data received and post to UDP Server using 4G modem

It will generate alerts as per AIS 140 standard
It will log Accelerometer data using LSM6DS3 ACCEL module
It will log Vehicle Location History using L89 GPS module
It is used to perform Vehicle Diagnostics using USB and BLE
It is used to flash Vehicle ECUs using USB
It is used to flash Vehicle ECUs using FOTA
It is used to perform Remote Diagnostics of Vehicle ECUs using TCP Server

Role

Software Engineer

Responsibilities

Develop UART interface, driver layers for S32K144
Develop Passthrough Protocol for interfacing CAN using UART, USB and BLE
Develop USB application, interface layer to support as Passthrough to Vehicle CAN data
Develop BLE application, interface layer to support as Passthrough to Vehicle CAN data
Go to Client's Location for giving a Demo on Passthrough CAN, UDS, AIS, CAN based alerts on Hybrid, EV, EDC type vehicles
Develop FOTA application layer using UART for BLE
Develop FOTA application layer to support linux SDK Update in EC25
Modify Linux Kernel Driver to support USB 2.0 Full Speed
Develop Automated Test Tool using WinForms for production testing where it does flashing using JTAG(J-Link), Perform IO Tests using NI DAQ, BLE strength using Bluetooth adapter, post test result in backend database using https and mysql connections, print label using a printer interface
Modify Linux internals to support ssh, openssl and sftp server
Cross Compile libraries for arm embedded linux
Develop USB application layer to support device as a sftp server via PPP connection

Tools and Platforms

S32 Design Studio, Eclipse, C, C#, WinForms, Visual Studio, linux shell script, Java, Android Studio

Project

Spray Controller

Company

Danlaw Technologies India Limited

Client

Mahindra Mahindra

Microcontrollers

NXP S32K144, Quectel EC25, Nordic NRF52832

Duration

Aug 2018 to Sep 2018

Description

Spray Controller is used in Mahindra Tractors at farms to spray pesticides automatically when the vehicle is moving in configured Geo-Fence polygon

Role

Software Engineer

Responsibilities

Implement Geo-Fence determining logic based on GPS Coordinates
Implement an API to control Sprayer Machine (Analog Voltage)
Implement a protocol in device to communicate with BLE Mobile App to save Geo-Fence polygons, Control Spray, Send data to display in GUI

Tools and Platforms

S32 Design Studio, Eclipse, C, Java, Android Studio

Project

DL2534

Company

Danlaw Technologies India Limited

Client

Volvo

Microcontrollers

ST's STM32F072CB and Nordic's NRF52832

Duration

June 2018 to July 2018

Description

DL2534 is a Vehicle Diagnostics Interface device for Volvo Bus, which is used to flash Vehicle ECUs, read DTCs of ECUs using USB and BLE . It acts as a J2534 Passthrough device using USB and BLE.

Role

Software Engineer

Responsibilities

Modify the CAN ISOTP interface, CAN driver layer to support STmin Tx and Rx as 0 ms

Tools and Platforms

Keil uVision, C

Project

ECU OTA 4G

Company

Danlaw Technologies India Limited

Client

Ashok Leyland

Microcontrollers

NXP's LPC1768, Qualcomm's mdm9207,

Duration

Feb 2018 to Mar 2018

Description

ECU OTA 4G is a proof of concept project to Ashok Leyland demonstrating Flashing Vehicle ECUs remotely from server communication using a 4G device

Role

Software Engineer

Responsibilities

Implement the Parsing logic of Intel Hex file

Implement UDS Programming Session flow

Tools and Platforms

Eclipse, C

Project

ConnectALL

Company

Danlaw Technologies India Limited

Client

Ashok Leyland,

Danlaw Xicheng, Danlaw Electronics Assembly

Microcontrollers

ST's STM32F072CB and Nordic's NRF52832

Duration

Dec 2017 to June 2018

Education

UG: **B.Tech/B.E. (Electronics/Telecommunication)** from **VIT University, Vellore** in **2015**

IT Skills

Skill Name	Version	Last Used	Experience
C, C++, C#, Python, Java, Assembly			
Shell Script			
ColIDE, Eclipse, Keil uVision			
Visual Studio, DevC++, PyCharm			
Matlab, Arduino, CC Studio			
IAR Workbench, Android Studio			
ST-Link, J-Link, SWD, GDB			
Windows, Linux, RTOS(CoOs, FreeRTOS)			
UART, SPI, I2C, CAN (ISOCAN, J1939, UDS)			
BLE, USB, TCP/IP, WIFI, GPS(NMEA)			
SVN, GIT, Bugzilla			

Languages Known

Language	Proficiency	Read	Write	Speak
English				
Hindi				

Telugu

Projects

Project Title: AL LCV

Client: Ashok Leyland

Nature of Employment: Full Time

Duration: Oct 2020 - Till Date

Onsite / Offsite: Offsite

Skill Used: Eclipse, C

Role Description: Develop WIFI application, interface layer using TCP/IP

Develop CAN Passthrough layer to support vehicle diagnostics using WIFI

Develop UDS based Diagnostics Session, Programming Session Application layer

Project Details: AL LCV is a telematics device to be used in Ashok Leyland Low Cost Commercial Vehicles. It logs the Vehicle BUS CAN data and report to Server using TCP/IP.

It performs diagnostics of Vehicle ECUs using WIFI, Bluetooth.

It logs the Vehicle location history using GPS.

It generates Vehicle alerts using Accelerometer. (Impact, Tilt, Rash Turn)

Project Title: Vahan

Client: Ashok Leyland

Nature of Employment: Full Time

Duration: May 2020 - Sep 2020

Onsite / Offsite: Offsite

Skill Used: Eclipse, C

Role Description: Develop GPS interface, driver layer to parse NMEA messages from L89 GPS Module using UART protocol

Develop ACCEL application, interface, driver layers to read data from LSM6DS3 Accelerometer Module using I2C protocol

Project Details: Vahan is a telematics device designed to support AIS 140 alerts in Commercial Vehicles

Project Title: Amber

Client: Royal Enfield

Nature of Employment: Full Time

Duration: Jan 2020 - Feb 2020

Onsite / Offsite: Offsite

Skill Used: Eclipse, C, WinForm, C#, Python, Visual Studio

Role Description: Develop FileSystem application, interface layer to save MQTT data on W25Q64J Serial Flash Module using SPI protocol

Develop FOTA application layer to support Firmware Upgrade from FTP Server

Project Details: Amber is a telematics device to be used in Royal Enfield MotorCycles to log Vehicle Location History, Vehicle Diagnostics Information using UDS and communicating to Mobile APP via BLE, post data to Server using MQTT

Affirmative Action

Category: General

Physically Challenged: No

Work Authorization

Job Type: Permanent

Employment Status: Full time