Shobhit Verma

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EXPERIENCE

Mirafra Software Technologies Pvt. Ltd   Hyderabad, India
   Software Engineer-I   Oct 2019 – Jan 2021

- Learning Linux Kernel OS Fundamentals and Linux Device Driver, Android , Python, WLAN, Testing, Bare Metal Programming, Build and Integration.
- Working on Mini Projects as part of Learning.
- Leading a team of 7 members for one of client project.

EDUCATIONAL QUALIFICATION

1. CDAC, Hyderabad   Feb 2019 – Aug 2019

   PG-DESD from CDAC, Hyderabad.

2. APJAKTU, Lucknow, India   Aug 2013-July 2017
B.Tech in Electrical and Electronics Engineering.

TECHNICAL SKILLS

- **Languages** : C(Advanced) , Embedded C(Intermediate) , Python(Intermediate), Data Structures (DS) (Intermediate).
- **Build and Debug Tools** : Makefile, gcc, gdb, SWD(Serial Wire Debug), OpenOCD (On chip Debugger).
- **IDE** : STM32CubeIDE
- **Worked on OS :** Linux , Windows, RTOS/FreeRTOS.
- **Embedded Firmware for Peripherals/Protocols**: SPI, I2C, USART, ADC, CAN, for STM32f446RE Board.
- **Testing :** SDLC(Software Development) and STLC(Software Testing) lifecycle, Types of Testing.
- **Worked on OS :** Linux , Windows, RTOS/FreeRTOS.
- **Processor Architecture** : ARM7, ARM Cortex-M4.
- **Build Tool** : Makefille
- **Version Control System** : git
- **Android** : Android Architecture Stack, Camera Architecture, Booting sequence.
- Good knowledge of Reading Schematics, Reference Manual for Microcontroller.

Certification Courses

- [Embedded Driver Development](#)

PROJECTS

1. GUI based WiFi Access Point Troubleshoot Tool – POC (Client Project)

Roles and Responsibilities: Develop the GUI login Screen

Language Used : Python, Linux Commands

Description:

The aim of this project is to develop a Proof of Concept for WiFi Access Point troubleshooting by using Python Language. Implement the features like login Screen, Tab based GUI and Scan all the WiFi clients connected to an Access Point , perform Speed Test, scan all the channels and its signal strengths so that based on it application can help to troubleshoot the AP and get better data rate instead of involving service providers.

2. Android Board (MSM8916) Bring up (Mini Project)

Roles and Responsibilities: Setup the build environment and build the images by resolving compilation issues.

Board Used : Qualcomm DragonBoard 410c

Description:

In this project, we have used msm8916 board to bring up by downloading Android specific code from code aurora and vendor specific binaries from Qualcomm site. Integrated both the code and generate Android images by setting up the build environment. Also performed Android Camera testing on the device.

3. Home Automation Simulation with BLE (Mini Project)

Platform used: Python, TCP/IP Protocol.

Description:

In this project we are monitoring the temperature and humidity values and then send it to series of chain of the master and slave block by making a BLE packet at each block and finally to the server using the TCP/ IP protocol in Python and then plotting it on graph and also writing data on file. Here   master block is responsible for monitoring the data coming from the slave and sending it to the server and it also alert the maintenance team if it crosses a predefined set limit.

4. IoT based Smart Shopping Cart (CDAC Project)

Roles and Responsibilities: Developing the driver.

Sensor Used   **:** RFID reader(MFRC522)

Board Platform Used   **:** Node MCU(ESP8266)

Description:

In this project we remove the making of long queue at billing counter inside a mall by using a system which is already there on cart. As soon as customer buy the product the details of customer along with items details is sent to billing counter by use of **MQTT** protocol along with on mobile App. Whenever the customer finished his shopping then he gets the bill on his mobile as well as on the shopping cart.

Soft skills

- Self Learner.
- Scientific minded.
- Solution Oriented.
- Good communication.
- Good Analytical Skills.

Declaration

I do hereby declare that the above information is true to the best of my knowledge.

Date   **Signature**
24/05/2021   Shobhit Verma