Resource Name	Vrishali Anil Divate
Experience	3+ yrs
Current Location	Hyderabad
Preferred Location	Hyderabad
Availability	
Last Updated Date	28 Aug 2019
Profile Highlights	Linux Device Drivers, Linux Kernel

Vrishali Divate +91 7995230592 vrishalidivate91@gmail.com

Career Objective:

To work under continuously developing environment being best in my field.

Summary:

Embedded engineer with over 3.6 years of valuable experience in the field of Embedded Domain.

- Good understanding and hands on experience of Linux Kernel and Device Driver Programming.
- Experience on Linux System Programming, IPC mechanisms and socket programming.
- Knowledge on GNU Tool chain, debugging techniques and cmake, make utilities.
- Experience in Linux Kernel configuration, Cross Compilation, Patching, creating images and writing kernel Modules.
- Good knowledge of Board Bring-up activity.
- Proficiency with network communications and network analysis (e.g. Wireshark).
- Work experience on MCP8555, MSP432-P401R Launchpad, Core 9G25-Lampex, ARM Cortex A53[BCM2835], Marvell 88E1111 etc.
- Work experience on interfaces like I2C, GPIO, UART, GIGABIT ETHERNET, NOR, NAND.
- Knowledge on bug tracking tool like JIRA.
- Exposure to Gstreamer framework, Python.
- Experience in version control tools like GIT.

Skill Set:

IDE's : CodeWarrior, Code Composer studio

Language : C, Embedded C

Debugging Tools : GDB, strace, ltrace, mtrace, objdump.

Communication Protocols: UART, I2C, SPI. **Operating System**: Linux, Windows.

Professional Work Experience (3.6 years):

➤ Quotient Four Technologies

Embedded Developer Feb 2016 to Aug 2019

Projects:

#Power PC Board Bring up (Client: AMSYS)

Description: The customized board peripherals like128MB NOR Flash, 1GB NAND Flash, Ethernet, DDR SDRAM, Timer, GPIO, UART, I2C etc. interfaced with MPC8555 processor.

Tools: Codewarrior IDE, JTAG debugger, Wire-shark, Hercules utility, Putty.

Roles and Responsibilities:

- Performed MDIO Interface and tested MAC Interface loopback, Copper Line loopback and External loopback.
- Handled different data rates (10/100/1000 Mbps) with Auto Negotiation capability.
- Flash memory Read/Write/Erase operations on NOR [S29GL01GP] and NAND [MT29F8G08], marching algorithm.

#YogiFi – Smart Yoga Mat (Client: Wellnesys)

Description: YogiFi SYS interfaced with MAT which consists of analog sensors. A system used to convert the analog data from the external sensor to digital bytes and it can be read by the YogiFi SYS Firmware.

Tools: Code Composer Studio, ARM GCC Cross Compiler, JTAG debugger, Minicom.

Roles and Responsibilities:

- Worked on Battery Fuel Gauge Configuration (BQ27441-G1A), Through I2C.
- For system status, OLED display using LED matrix.

#Lampex Board Bring -up (Client: Lampex)

Description: The aim of the project is to create a program or subsystem that provides API to higher level user applications to interact with device drivers. This is used for generating the electric bills, tickets etc. **Tools:** arm-non-linux-gcc, make utility, Kernel source code.

Roles and Responsibilities:

• Create the subsystem to interact with low level driver and reading writing data.

#Smart Glove

Description: MSP432 scans the zone & tool sequence data through RFID and sends it over Wi-Fi module to raspberry pi acting as gateway which sends the data to server for verification of zone or tool sequences and acknowledges of the authenticity of the scanned zone or data.

Tools: Code Composer Studio, RFID module MFRC522, Serial monitor (minicom), Raspberry as gateway, MSP432P401R target board.

Roles and Responsibility: To develop software for MSP432 that takes the data as input from RFID sensor MFRC522 for authentication of zones and tool sequences.

Educational Details:

• **B.Tech** in Electronics and telecommunication engineering in KSGBSS's Bharat Ratna Indira Gandhi CE, 2014, Solapur, Maharashtra with I class distinction.