

CURRICULUM VITAE

M. NARESH

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SUMMARY

Having 3.6 years of working experience in user space application development, shell scripting and drivers, on Linux platform, Good knowledge in C and System programming.

HIGHLIGHTS

Experience in Implementation of wrapper libraries and testing. Worked on I/O control and I2C gpio expander driver and developing API's, Interfaced GPIO Based Qwerty Matrix KEYPAD(8*8) on Arm cortex A9 Board.

SKILLS AND COMPETENCIES

Current Role

ASSISTANT ENGINEER

Skills

Good understanding of Linux internals and Data Structures.

Hands of working experience in C, Linux Internals, Device driver, debuggers (GDB).

Worked on Linux Kernel Programming and User space programming.

Good at IPC's i.e. FIFO, Shared Memory, Pipes.

Good knowledge on the Thread Management, process Management, Memory Management.

Good understanding on Linux Kernel, File systems.

Good understanding of I2C, SPI protocols.

Good Knowledge on Interrupts.

Good knowledge on shell scripting

Worked on Cross compilation of Open source libraries such as opensource libraries, Busy-Box, Linux-3.0.35 kernel.

Experience in Integration & Debugging different types of modules on POS(Point of sale) terminal like I/O control, keypad matrix.

Working experience on Kermit.

Knowledge on building root file system and testing.

Worked on Implementation of wrapper libraries for Hardware peripherals API's.

Knowledge on building Linux kernel and drivers.

Requirement gathering and feasibility analysis.

Knowledge transfer to new team members.

Programming Languages/Operating Systems / Platforms /

C,system programming
Ubuntu 16.04, Linux, Linux os.

Tools

Gcc compiler with freescale tool-chain, vi, kermi.

EMPLOYMENT HISTORY

Jul 2017 - Present

LINKWELL TELESYSTEMS PVT. LTD
System Programmer

EDUCATION

2016

B.Tech (ECE) in 2016 from CMR College of Engineering & Technology, Hyderabad with 69.50%.

2013

Diploma (ECE) in 2013 from Indur institute of engineering and technology, siddipet with 80.58%.

2010

10th in 2010 from Ravindra High School, siddipet with 86.50%.

PROJECT EXPERIENCE

LINKWELL TELESYSTEMS PVT. LTD

Project Title#1
Platform

GPIO Based (8*8) Qwerty Matrix keypad

(Software) Linux arm ,(Hardware) IMX6 Sololite based board

Architecture Type
Industry
Location
Role
Responsibilities

Arm Cortex A9

Semiconductor

Hyderabad

System Programmer

- Responsibility is to implement the SHIFT ,FUNCTIONAL,SPECIAL KEY logic operations in driver for the keypad device.
- Testing the logic and resolving the issues.
- Keymap array arrangement in board init file for proper reporting the key to kernel input subsystem.

Description

This project was related to GPIO Based(8*8) Matrix keypad interface to Arm cortex-A9 board. Myself configured the respective row and columns GPIO's in BSP file(Board init file),Initialized the row and column keys,Gpio pins in board init file. Calculated the respective hex values for the configured keys and implemented the logic for SHIFT and FUNCTION key operation and special character in matrix keypad driver file present in linux-3.0.35 kernel and to drive the Qwerty matrix keypad.

Project Title#2

Platform
Architecture Type
Industry
Location
Role
Responsibilities

I/O Control Driver and I2C bus gpio expander driver Implementation

(Software) Linux arm ,(Hardware) IMX6 Sololite based board

Arm Cortex- A9

Semiconductor

Hyderabad

System Programmer

- Responsibility is to implement the GPIO based I/O control and i2c gpio expander (pcf8575) driver and testing.
- Testing the Hardware modules response for the driver from Api.
- Wrapper libraries implementation for the I/O drivers for enabling and disabling the peripherals and testing. Support to the production department.
- Giving of patch(shell script) to fix the librarie issues.
- Providing support to the clients to develop their application with help of libraries.

Description

This driver basically developed for power control of all the modules. This driver was developed for pos machine in which we are accessing the GPIO pins to do the power control of all peripheral.This is compiled with linux-3.0.35 kernel. Myself gone through the schematic of the pos device and wrote the driver by accessing the various gpio pins for the respective peripherals.

Project Title#3

Remote Health Management System (RHMS) & Device Management

Platform
Architecture Type
Industry
Location
Role
Responsibilities

(Software) Linux arm ,(Hardware) IMX6 Sololite based board

Arm Cortex- A9

Semiconductor

Hyderabad

System Programmer

- Responsibility is to provide the device firmware and applications to be up-to-date.
- Creation and verification scripts for application and firmware patches.
- Device Registration and deregistration in RHMS server.
- Documentation for RHMS client and Server Responsibilities.
- Finding the Device Communication issues at production and resolving.

Description

Upgrading the Firmware of electronic point of sale devices (EPOS) remotely. Establishing client server. Communication between the device and server and updating the status of I/O peripherals of the device to server and upgrade EPOS firmware field devices. My self developed RHMS and Device Management.

LANGUAGES

Speak	ENGLISH, TELUGU, HINDI
Read	ENGLISH, TELUGU, HINDI
Write	ENGLISH, TELUGU, HINDI