**Trilokesh Rangam**

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Embedded Linux Engineer

4.9 years experience in embedded Linux integration and development.

**Experience:**

**PHYTEC Messtechnik GmbH** Mainz, Germany

On-site coordinator

• Worked as a project coordinator for PHYTEC Embedded Pvt. Ltd (Bangalore, India), which is the joint venture of EasyARM and the PHYTEC Messtechnik GmbH (Mainz, Germany).

• Guidance to the India Team for the BSP development and the testing.

• Learned about the Bug tracking system, testing the Linux Bsp with LTP-DDT.

**PHYTEC Embedded Pvt. Ltd.** Bangalore, India

Sr. Software Engineer April 2013 – Present

• Development and Integration of Linux to ARM platform of ARM Cortex-a8, Cortex-a9

• Integration of Android to ARM Cortex-a8, Cortex-a9 o Barebox bootloader, kernel 3.2/3.4/...., drivers (LCD, Touchscreen, ADC,...) and user space application development.

• C, Shell script, Buildroot, ptxdist, yocto, Git/repo

**EasyARM** Bangalore, India

Software Engineer Aug’ 2009 – April 2013 (45 months)

• Development and integration of embedded Linux to ARM platform for ARM9 and ARM11 cpus o Loader, bootloader (U-boot), kernel 2.6.32/3.x, drivers (touchscreen, wlan, led ...) and userspace development.

• Development and integration of Android to ARM platform of ARM9 and ARM11 processors.

• C, shell, Buildroot, Git/repo

• Development of the firmware for ARM7, Cortex-M0, Cortex-M4

**Skill Set**

**Languages** C, Unix Shells, Web development: PHP/HTML/CSS/Java scripting

**Embedded System** Good knowledge in Linux and embedded use, Linux OS assembly from scratch, and Android system development (BSP) and software integration. Device driver and Kernel development x86, ARM targets and firmware development for PIC/Atmel microcontrollers, ARM microcontrollers, Cross compilation toolchains and Linux programming (Android, Buildroot, crosstool-NG, uClibc, glibc, Busybox, bootloaders, etc.)

**GNU/Linux tools** make, gcc, gdb, gdbserver, ddd, valgrind, qemu

**Tools** Git/repo, SVN

**Protocols** Wifi, Bluetooth, RFID, Zigbee, GPS, I2C, USB, RS232...

**Misc** Open-source licenses, digital electronics, datasheets and PCB schematics reading

**Strengths**

o Fast learning aptitude.

o Urge to take up challenging assignment.

o Sincere in work to obtain the best results.

o Highly motivated team player always works towards success.

o Adaptable, Committed, Dedicated towards work.

**Projects**

**i.MX6 Platform:**

 Linux support for the PHYTEC’s phyFLEX-i.MX6 System On Module.

 Ported Android Jelly bean version 4.2.2 on top of Freescale repo.

 Added support for the Nand flash(Micron)

 Added support for SD/MMC

 Added Display support for different LCD’s of 5”/7” inch with Resistive and capacitive touch.

 Added support for serial devices like UART, USB, I2C...

 Added support Network devices (Ethernet, CAN).

 Added support for the Audio (I2S).

 Added support for Camera (CSI2).

**AM335x Platform:**

 Developed the BSP for PHYTEC’s phyCARD-AM335x System On Module.

 Ported Android Jelly Bean version 4.2.1 on top TI’s repo.

 Added support for the Nand flash(Micron)

 Added support for SD/MMC

 Added Display support for different LCD’s of 5”/7” inch with Resistive and capacitive touch.

 Added support for serial devices like UART, USB, I2C...

 Added support Network devices (Ethernet, CAN).

**Arm9 Platform:**

 Integrated the Air-Print (Avahi network printer) support on the Android device.

 Boot time Optimization for the Android Gingerbread version 2.3

 Added custom update support for the device

 Added fastboot support to flash the boot images to the Nand flash through USB OTG.

**Customer Support:**

 Given the best support for the customer for their projects on System On Modules.

 Integrated the NTP server on the OpenBoard-AM335x which is based on the phyCORE-AM335x of PHYTEC’s System On Module. NTP server with time syncing with the integrated Motorola GPS receiver with 1PPS support.

 Video streaming on the phyFLEX-i.MX6 which deals with the gstreamer.

**Others**

• Have good knowledge on Linux platform drivers

• Good knowledge on the testing of the BSP of Linux with SYSfs/PROCfs/DEV.

• Good knowledge on the LTP-DDT an open-source testing tool.

**Education**

**JNTU** Hyderabad, Andhra Pradesh

Pursuing Final year B-Tech in Contact Cum Correspondence mode.

Specialization in **Electronics and Communications**

**SBTE&T** Loyola Polytechnic (YSRR) Pulivendula

Diploma in Electronics and communications (3 years Diploma program).

Secured **70.89%** and completed in 2007

**SSC** Dharmavaram Andhra Pradesh

Schooling in Maatha Eng. Med. School Dharmavram secured 69.33% completed in 2004.