Tan. Le Minh

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#### Education

### University of Science, Vietnam National University

HCMC

B.A.Sc., Electronics and Telecommunication (GPA: 7.9)

Sep. 2009 - Sep. 2013

 Relevant courses: Computer Structure, Matlab and DSP Lab, Microcontroller and Lab, Data structure and Algorithms, Computer Interfacing and DAQ, OOP, Mobile Device Application Programming, Embedded Systems

# Work Experience

# Robert Bosch Engineering and Business Solutions Vietnam

HCMC

Senior Software Engineer - Product Development

Nov. 2015 - Present

- Project that developed the streaming system that mounted on the vacuum cleaning robot as surveillance with motion detection.
- Study customer's requirement and implement new specification then do the POC in evaluation kit
- Research how to bring up i.MX6 custom board running Linux and first time bring up the Linux board.
- Working closely with hardware team while bringup and testing hardware.
- Bring up the Broadcom WiFi driver on Linux.
- Understanding the schematic for customizing the device tree in the Linux kernel and using the oscilloscope to measure the bus.
- System integration on Yocto and customize for the specific project.
- Customize the rootfs, device tree, Linux kernel and u-boot.
- Design and implement the BIST(Built-in Self Test) component that executes the hardware diagnostic when bootup.
- Do the FOSS (Free and Open Source Software) license checking for the product go to the market.
- Responsible for designing and implementing the streaming application based on Gstreamer platform and working closely with Wowza streaming team to integrate with Wowza service.
- Responsible for setting up the PC-Lint (Commercial Static Analysis Tool) on the GNU project and fix the error/warning/info reported by PC-Lint.

### Robert Bosch Engineering and Business Solutions Vietnam

HCMC

 $Senior\ Software\ Engineer\ -\ COC\ HMI$ 

May. 2016 - Aug. 2016

- Project that supported the German Bosch to integrate the Bosch protocol into the i.MX6 platform.
- Worked as the system integration engineer based on Yocto project.
- Integrated the packages support the web development such as: AngularJS, html5,...
- Designed and implemented the C++ application(OOP) as the json-rpc websocket server based on the libjson-rpc-cpp that will receive the json data from the front end (Ex: increase the oval cooking temperature to  $40^{\circ}$ )

# Robert Bosch Engineering and Business Solutions Vietnam

HCMC

Embedded Software Engineer

Sep. 2015 - Nov. 2015

- On-site working on India to support the lazer distance measuring project.
- Setup the eclipse debugging for the project and modified the Makefile to support gdb debugging.
- Research open source static analyzer tools: cppcheck, clang,... and apply to the project.
- Report the FOSS checking in Yocto for the project.
- Measure the memory footprint using in the system.

# Global Cybersoft Vietnam

**HCMC** 

Embedded Software Engineer

Sep. 2013 - Sep. 2015

- Maintained and developed the set-top box software for DIRECTV(AT&T).
- Study and research the embedded Linux architecture.
- Develop the multithread programming, gdb debugging.
- Understanding how to design the embedded software completely from component design, class diagram, sequence diagram.
- Develop IPC programing for component communications.
- Design for test and design for debugging.
- Improving the Java, C++, C, bash coding skill.

# Renesas Design Vietnam

HCMC

Internship - Embedded Software Engineer

Jun. 2012 - Aug. 2012

- Study the 8-bit MCU designed by Renesas, compiler, IDE, debugging.
- Study and implement the diagrams such as: flowchart, function,...
- Was responsible for all lab testing routines involving all peripherals.
- Design and implement the digital watch with Lunar calendar feature.
- Besides, improve the soft skills such as: presentation, team work, English.

# **Home Projects**

# Porting Clutter project on Beaglebone Black

HCMC

Sep. 2016 - Oct. 2016

- Repository: https://github.com/lmtan91/meta-lmtan91/tree/master/clutter
- Using Yocto to port Clutter into Beaglebone Black in case of creating nice GUI.

### Porting LWIP and FreeRTOS into STM32F4 Discovery kit

Engineering Physics Project Lab, APSC 459

Jan. 2017 - Feb. 2017

- Repository: https://github.com/lmtan91/STM32\_ETH\_LWIP
- Porting to use GNU GCC compiler, OpenOCD for debugging, Eclipse as IDE for free without using Commercial Compiler and IDE.
- Research FreeRTOS and LWIP by implementing some applications as web server.

#### Awards

Sunflower Mission Engineering and Technology Scholarship Program

2012

Languages: C/C++(4 years), LATEX, Java(1 year), bash script

Operating Systems: Linux (Fedora, Ubuntu, CentOS), Windows

IDE: vim, Eclipse

Lab Skils: Digital Scopes

Source Control Tool: Mecurial, SVN, Git

Miscellaneous: excellent troubleshooting and debugging skills, problem solving skills, bug killers

# Interests

Academic: Embedded Control & Robotics, AI, Machine Learning,

Sports: Chen Taiji, trekking

Computers: enjoy using and learning Linux systems, Building electronics projects at home, and

learning AI and Machine Learning at home

Musical: Playing guitar

Other: Reading books