
Tiana RAKOTOVAO ANDRIAMAHEFA

Annexe de la cité universitaire – Agadir, Morocco 80000

Mobile: (+212) 6 57 34 75 76

Nationality: Malagasy

rakotovaomahefa@gmail.com

OBJECTIVE

Willing to work as an engineer in system programming, embedded system or system administration. To meet challenges, develop technical expertise and take responsibility within a team.

EDUCATION

Engineering degree in Computer Science and Engineering, September 2007- June 2012

Ecole Nationale des Sciences Appliquées (National School of Applied Sciences)

Agadir, Morocco (abroad)

Electrical Engineering, 2006 – 2007

Ecole Supérieure Polytechnique d'Antananarivo (Polytechnic University of Antananarivo)

Antananarivo, Madagascar

Baccalaureate Diploma, 2006

Major: Mathematics and Physics. Graduated with Honors - Madagascar

PROFESSIONAL INTERNSHIPS

ZYXIO & MASCIR

March 2012 - Present

Final study project: Firmware development for the Zyxio sensawaft MEMS

- Signal processing and simulation on Matlab
- Implementation in C on a 8051 microcontroller
- Provided a Bluetooth module (with HID profile) to the final product

OPEN WIDE INGÉNIERIE (online internship)

September - October 2011

Development of an Eclipse plug-in for configuring Buildroot

- Technical feasibility study
- Software design and development
- Framework : SWT, JFace, Eclipse Framework, JNI C++

OPEN WIDE INGÉNIERIE (online internship)

August 2011

Linux real-time and xenomai: Porting a program from the POSIX skin to the VxWorks skin.

- Inter-Process Communication, POSIX Threads, Real-time clocks
- Xenomai RTDM driver

OPEN WIDE INGÉNIERIE (online internship)

February - June 2011

Development of the Android application FLY'on for the Lyon Airport

- Developed a parser for XML files downloaded from the server
- Developed the graphical user interface

Android NDK test and evaluation

- Developed an application test based on Android NDK and OpenSL ES

Built an Ethernet/Wi-Fi router on an x86 architecture.

- Configured and built a Linux operating system based on OpenWrt
- Configured the GRUB 2 boot loader
- Wrote shell scripts to set up the router : network interfaces, udhcpd, netfilter

OPEN WIDE INGÉNIERIE (online internship)

Jully 2010

Embedded Linux: Set up a system for debugging a program running in the kernel space and/or user space.

- Target architectures: ARM and x86-64 emulated by QEMU
- Built the target system from scratch or using Buildroot
- Built the U-Boot boot loader
- Wrote kernel modules and programs for test, and debugged them with kgdb and gdb

TECHNICAL SKILLS

Languages	C, C++, Java, Python, Shell, Makefile, XML, 8051 assembly language, PHP, HTML, CSS
Embedded Linux	Linux from scratch, Buildroot, OpenWrt, Crosstool, ELDK, Busybox
Real-time Linux	POSIX API, Xenomai (POSIX skin and VxWorks skin), RTDM
Linux Administration	xinetd, netfilter, bind9, apache, postfix, openLDAP, openssl, squid
Firmware	USB HID, Bluetooth HID, UART, 8051 microcontroller
Java	JSE, SWT/JFace, JNI, JUnit, log4j, Java RMI – JEE, Hibernate, Struts2 – Android
Frameworks	Eclipse RCP and plug-in, Qt, CORBA
Software design	UML, design patterns
Tools	vim, gcc, SDCC, gdb, jee-sdk, git, Keil, Eclipse, cygwin, Matlab, GlassFish
Computer vision	Matlab implementation

LANGUAGES

English	good
French	fluent
Malagasy	native language

ACTIVITIES

- Creator and developer of Ekconf - www.github.com/mahefa/ekconf : an Eclipse plug-in for configuring the Linux Kernel or Buildroot.
- Debian GNU/Linux system administration and customization.
- Piano accompanist and tutor - choir member.
- Traveled to Kentucky USA in September 2010