Peng Liu

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OBJECTIVE A Position Focusing On Development Tools

COMPUTER SKILLS

- *Languages:* C, ARM assembly, Python, Java, Perl, Virtual Basic for Applications
- *Platforms & SDKs:* Linux, Android, Qt, WDM SDK
- *Software:* Git, Clearcase, Foswiki, Hudson

PREVIOUS WORKS

- *Current Drain Automated Test:* A system to measure phone's current drain under customizable use cases. The hardware part is made up of Hudson server, Windows client, NI DAQ device, USB cable switch and calling box. I'm working on the software part, in Python, Java and C.
  The measurement results are at http://pmdashboard.am.mot.com/CDDashboard.html
- *Aplogd:* An application on the phone, widely used in MotoAndroid platform in taking logs. Written in C and shell script.
  More information can be found at https://sites.google.com/a/motorola.com/trace-and-panic-logging/
- *PM log parser tool set:* A set of tools help the analysis of system's power state.
  It can be downloaded at https://sites.google.com/a/motorola.com/andriod-power-management/pm-logging-parser/parser-user-guide
- *Watchdog Reset Tracer:* A Patch With Which Watchdog Reset Context Can Be Logged. A Deep Hack Into ARM Arch Code In Linux Kenrel and The Secure Mode Code in PPA.
- *PCK:* An package management system to support the integration of iDEN phone. Based on Eclipse, written in Java.
- *OSS Tools:* I also introduced opensource tools into team, such as PowerTOP and etm2human.

EXPERIENCE

Senior Software Engineer Feb 2006 - Present
Motorola, Libertyville, IL and Beijing, China

- Developing tools with C, Python, Perl and Java to implement power management features and improve their performance for Android on OMAP platform.
- Developed software features with C and assembly in user space and kernel space to enable native application and kernel debugging for Android on OMAP platform.
- Developed a tool to debug issues in MPU-modem communication.
- Leading a 5-member team, developed a software integration tool, an Eclipse-based application, for Motorola iDEN product line. The tool was used in daily work of over 400 developers worldwide.

Software Engineer Aug 2003 - Jan 2006
Pollex Mobile Software Co.(Mobile Product Unit of Hopen Software Engineering Co. before 2005), Beijing, China

- Developed part of interrupt handling subsystem and block device subsystem of Hopen Operating System 3.0, which was certificated as one of best innovative products by Beijing Municipal Science and Technology Committee.
- Deployed Hopen Operating System in different machines. Major work included extending the platform-dependent layer of Hopen OS to support IBM PowerPC 405 core as well as Intel XScale Wireless MMX technology, and developing device drivers such as the LCD controller and the USB controller of more than 5 mobile products of Lenovo, NEC and Haier.
- Developed prototyping projects with multiple emerging software frameworks for mobile products, such as Qtopia and OpenMoko, and submitted evaluation reports to management team.

Research Assistant Sep 2000 - Jul 2003
State Key Lab of Fire Science, Hefei, China

- Participated in the research project, the application of Ethernet in real-time control system.
- As a programmer, participated in the project to construct a ceramics manufacture control system, designed and implemented a CAN field bus interface circuit board and its WDM driver.

EDUCATION

M.C.S. ONLINE in Computer Science Present
University of Illinois, Urbana, IL

M.E. in Safety Engineering 2000-2003
University of Science and Technology of China, Hefei, China

B.E. in Automation 1995-2000
University of Science and Technology of China, Hefei, China

ACTIVITIES

Captain of the college basketball team of USTC
Member of the track and field team of Nankai High School