Russell E. Harmon

CONTACT
INFORMATION

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SUMMARY

I love to tinker. I enjoy spending my time working on personal projects. Some of the notable projects I have worked on include the Linux kernel and the Gentoo and Debian Linux distributions. I have become very good at picking up new ideas quickly, and expanding what I already know with a direction and my own research.

EXPERIENCE

Google - Mountain View, CA   6/5/2012 - 8/2012
Chrome OS Kernel Engineering Intern   http://google.com/

Worked on the Kernel team for the Chromebook. My work centered around the creation of a unit test which analyzes the kernel-to-kernel latency of input events, and the associated frameworks to make this test possible. This work involved adding trace events into the Linux kernel, X input drivers, and the Chromium browser; then building tools to analyze traces generated by these events.

Microsoft - Boston, MA   6/6/2011 - 8/26/2011
Software Development Engineering Intern   http://micorosft.com/

Worked on the "Sustained Engineering" team on the Application Virtualization product. The sustained engineering team maintains the released version of App-V. Written in *C++*, I worked on a migration feature for the App-V and Office products.

Apple Inc - Cupertino, CA   6/1/2010 - 11/16/2010
Engineering Intern   http://apple.com/

Worked on the "Platform Kernel" team in the Core OS department at Apple. The majority of my work entailed work on *libC*, and on *XNU* (the Mac OS X kernel). My two major projects were (a) migrating code out of the kernel into userspace to take advantage of *ASLR* and (b) creation of an automated testing suite to test Mac OS X's power management on Intel processors. The *ASLR* work involved a great deal of collaboration between several different teams within Apple.

Gentoo Linux - Gentoo Foundation   August 2007 - August 2010
Package Maintainer   http://www.gentoo.org/

Wrote and maintained ebuilds for the PCSX2 Play Station 2 emulator, and related plugins. Work on this included significant bash scripting, and understanding and use of autotools and various debugging tools.

SafeNet Inc - Belcamp, MD   June 2008 - June 2010
Engineering Intern   http://www.safenet-inc.com/

Worked on the SafeNet Management Console (SMC) on a team of 7. SMC is a web application built on *Java*, *JBoss*, *Hibernate* and *JSF* which manages high speed network encryption devices that SafeNet manufactures, including top-secret devices. Responsibilities included (a) creating requirements documents, (b) implementing requirements (IPv6, file synchronization), (c) testing and (d) fixing defects. Some of the specific tasks that were assigned while working there included transparent file synchronization between machines, implementing IPv6 support and implementing support for multiple SMC servers managing the same device (distributed devices).

New York City Department of Education - Bronx, NY   September 2002 - June 2006
IT Specialist   http://schools.nyc.gov/

Worked at Lehman High School. The work there included (a) setup and maintain the computer systems, (b) repair and maintain the network, (c) diagnose and eliminate viruses and malware on the school's network and computer systems and (d) audit the network for malicious activity.

EDUCATION

Rochester Institute of Technology - Rochester, NY   September 2006 - Expected November 2013
- Major: B.S./M.S. Computer Science
- M.S. GPA: 3.2
- Minor: Music, Concentration: Computer Engineering

- Course work completed, thesis ongoing. Expected completion, November 2013

Throughout my education, I've tried to balance my desire to push my knowledge into broader subjects than what was currently being taught to me in classes, and the pursuit of good grades. I eventually came to the decision that while completing my degree was my top priority, beyond that I would gain more benefit by pursuing extracurricular technological education. In the pursuit of this, I joined the Computer Science House (discussed in "Special Accomplishments"), and taught myself a great deal about subjects ranging from networking and systems administration to web design.

I've additionally pursued breadth in my formal education with my concentration in computer engineering and the classes I took within my department, including robotics, systems programming, computer graphics and programming language theory.

At home, I run an enterprise class network, with an IPSec VPN, internal DNS and DHCP, QOS, Kerberos and LDAP, all configured by hand without the use of pre-packaged configuration tools such as IPCop or OpenWRT. I approach systems administration avoiding the use of tools to make things easier because I wish to learn how all of these systems work, and I feel this is the best way to do this.

I'd also recommend you visit my GitHub page `http://goo.gl/8VTUk` which showcases work in various states of completion including:

• the current state of my thesis	`http://goo.gl/jf4ah`
• a significant fork of the classic 1980s game NetHack	`http://goo.gl/QgEPj`
• a SQLite regular expression plugin	`http://goo.gl/FZX68`
• a SOCKS proxying library	`http://goo.gl/7tMgo`
• a NetHack inspired bullet hell game written for the PCJr	`http://goo.gl/5FYII`

TECHNICAL SKILLS & CERTIFICATIONS

Fluent Languages (a) C (b) ZSH (c) Java (d) Ruby (e) C++ (f) Javascript (g) Python
Operating Systems (a) Linux [programming & administration] (b) Mac OS X (c) Windows
Server Administration (a) LDAP (b) Kerberos (c) BIND (d) DHCPD (e) Radvd (f) Apache
Networking (a) Cisco Academy, with honors (terms 1 and 2) (b) IPv6 (c) DNS (d) DHCP (e) IPSec
Tools (a) Make (b) Autotools (c) CMake (d) LLVM (e) Regex (f) LaTeX
Certifications (a) Cisco Academy, with honors (terms 1 and 2) (b) A+

SPECIAL ACCOMPLISHMENTS

- Joined CSH (Computer Science House). `http://www.csh.rit.edu/`
CSH is a student-run, RIT sanctioned organization tailored for computer science interested individuals. Students who live on CSH have access to member-only services, seminars and expertise all created and provided by CSH members and alumni. While there, I was elected first as a network administrator, then later as the director of all the network administrators.
- At age 8, built my first computer.
- At age 10, worked my first job at City Island Computer Services.
- At age 12, attended my first programming class at Lehman College.