Daniel M. Smith

Current Address:
6374 NE Marina Ct.
Hillsboro, OR 97124

Contact Information:
dsmith *at* danplanet *dot* com
(503)693-0104

Education

◇ **M.S. Computer Science** (August 2003 - May 2005) GPA: 3.72
North Carolina State University, Raleigh, NC

· Modified the Linux kernel scheduler to use the additional contexts of SMT CPUs as service processors

◇ **B.S. Computer Science** (August 1999 - May 2003) GPA: 3.50
Graduated Cum Laude from Appalachian State University, Boone, NC

· Designed and developed real-time GUI monitoring system for a custom biological apparatus
· Dean's List 5 Semesters, Chancellor's List 1 Semester
· Named by CS Department Faculty as "Outstanding Senior"

Work Experience

◇ **Staff Software Engineer - Open Virtualization**
IBM Corporation, Beaverton, OR (June 2005 - Present)

· Kernel development, including userspace-controlled block driver
· Xen Hypervisor feature development, including work on HVM subsystem
· Xen Control plane development and bug fixes
· Developed xm-test verification suite which led to the stabilization and release of Xen 3.0, and is still being used for Xen release verification

◇ **Pervasive Co-Op**
IBM Corporation, Boca Raton, FL (August 2004 - May 2005)

· Development of X+V applications and server frameworks

◇ **Research Assistant**
North Carolina State University, Raleigh, NC (August 2004 - May 2005)

· Explored alternative approaches to realizing performance gains on SMT processors

◇ **Extreme Blue Intern - "Outspoken" Team**
IBM Corporation, Austin, TX (May 2004 - August 2004)

· Lead the development team that created the first complete X+V multimodal web application using WebSphere, DB2, and MySQL, which is currently being used by IBM sales to pursue large contracts
· Rebuilt IBM's Deep Blue RS/6000 machine, added a voice-enabled web chess interface
· Lead inventor on componentization patent disclosure, co-inventor on 6 other disclosures

Skills

◇ Language Experience: C/C++, Python, Java/J2EE, Perl, Tcl, Expect, PHP, X+V, XHTML, XSLT, JavaScript, XML, UNIX shell scripting, LaTeX
◇ Experience with Linux, Xen, MySQL, DB2, WebSphere, Apache, CGI programming, Postfix, Tomcat
◇ BSD socket programming
◇ Linux Kernel Development
◇ System and Network Administration: Linux, BSD, Solaris, and Windows

Interests

◇ UNIX programming
◇ Open Source Software
◇ Network Architecture, Administration, and Programming
◇ Real-Time Systems and Computer Automation
◇ Wide-Area system integration and administration
◇ Amateur Radio

Open Source Projects

◇ **Xen** - An open-source hypervisor for the Intel architecture
◇ **dm-userspace** - An extension for the Linux device-mapper subsystem that allows a userspace application to make block placement decisions, enabling the use of complex on-disk formats and intelligent block-fetching schemes

revision 1.66