ADAM GASHLIN – agashlin@gmail.com – http://gashlin.net

SKILLS

Expertise in C and C++
Design and analysis of PowerPC, MIPS, x86, ARM, 6502 assembly
Experience with distributed locking and caching
ADPCM decoder design (GC/Wii 'DSP' and 'AFC', IMA variants, Microsoft, XA, Sony, Yamaha, CRI ADX, etc)
Media multiplexing and container design, incl. compression and obfuscation (MPEG, Ogg, XMA, CRI AIX/USM, etc)
Experience with ActionScript 2.0, Perl, JavaScript, Java, MySQL, Bash, Scheme, Python, Ruby, Java VM, Qbasic
Revision control with CVS, Subversion, Rational ClearCase
Handy with a hex editor

EXPERIENCE

Software Engineer, International Business Machines Corporation 6/2008-5/2010
Owner of distributed locking component for PowerHA pureScale, a high performance, high reliability clustering solution used in the IBM DB2 pureScale database. Documented behavior of inherited code, worked with DB2 stakeholders to identify and correct defects, performed analysis of field reported defects, and designed and implemented new features. Designed and developed custom debugging/dumping framework for AIX and SUSE Linux on PowerPC 64 and x86-64. Participated in regular code reviews with teammates.

Technical Intern, International Business Machines Corporation 5-8/2007
Developed innovative framework for monitoring performance of AIX systems, presented overview to executives.

Student Systems Administrator, Rutgers University LCSR/DCIS 3-8/2006
Managed deployment, testing and customization of Fedora Core 4 and 5 for student computer labs. Developed tools for automated management and maintenance of student labs and department servers.

Intern, Siemens Corporate Research 6-9/2004
Explored and experimented with PlayStation 2 graphics hardware. Modified 3D chess game for PS2 Linux to support online play between the PS2 and AOL Instant Messenger. Ported videoconferencing software to PS2 Linux.

Independent Projects (more details at http://gashlin.net/projects.html):
- Designed and implemented several playable prototype games in python and ActionScript 2.0
- Developed and managed video game audio decoder project, now supporting over 200 formats, “vgmstream”
- Built system for extracting and storing music from N64 games, “USF”, and “64th Note” Winamp plugin for playback
- Wrote an NES emulator in MIPS assembly for the N64, “Neon64”
- Ported and optimized video game audio playback for “Rockbox” open source audio player firmware (rockbox.org)
- Devised method and software for loading N64 code via mass-market GameShark, “gsupload”
- Developed libraries for open source N64 development with gcc, “alt-libn64”
- Created N64 programming “Starter Kit” with source code, original MIPS assembler, and documentation
- Wrote 1 kilobyte NES game in 6502 assembly, “Escape from Pong”, now a part of Debian GNU/Linux

EDUCATION

Bachelor of Science, Computer Science, minor in Psychology, Rutgers University, New Brunswick, NJ, 5/2008

HONORS AND AWARDS

- Rutgers Computer Science Department Highest Honors in Computer Science, 5/2008
- 31st ACM International Collegiate Programming Contest World Finals (Tokyo), 3/2007
- 2006 ACM Greater New York Programming Contest, 1st place team
- Rutgers College School of Arts and Sciences Dean's List, Fall 2006 and Spring 2007
- Rutgers University School of Engineering Dean’s List, Spring 2006
- Rutgers University Outstanding Scholar Award (annual scholarship, 2004-2008)