

Education

M.S. / Ph.D Electrical Engineering and Computer Science

University of California, Berkeley (2007 – Present)

- Graduate Researcher in CHES (Center for Hybrid and Embedded Software Systems) with Professor Edward Lee
- Focus on Embedded Systems, Computer Architecture, Models of Computation, Real-Time Systems, Parallel Processors, Embedded Software

B.S Computer Engineering

University of California, Santa Barbara (2003 – 2007)

- Valedictorian of the Computer Engineering class of 2007 with highest honors
- Received IEC William L. Everitt Student Awards of Excellence
- 3.91 overall GPA, 3.97 Major GPA

Experience/ Projects

- **Software Design Engineer – Microsoft**, Seattle, WA (Summer 2006)

Worked in Microsoft Windows core deployment team. Read through windows kernel code base, understand data structures and design project to analyze Windows Imaging file format for Windows Vista. Develop tool to interact with file format and improve windows setup performance.

- **Intern Developer – Novacoast**, Santa Barbara, CA (12/2005 – 4/2006)

Professional software and IT company, expected to learn and adapt to new technology quickly. Renewed their intranet web system with PHP Interaction with SQL databases and LDAP, mixed with AJAX. Heavily focusing on classes and object oriented programming to create cleaner and more efficient code.

- **Projects –**

- **Network Applications** – Programmed a multithreaded ftp client that spawns multiple connections to download a file simultaneously. Then it reconstructs the file.
- **Operating Systems** – Added virtual memory management system to bare Berkeley “nachos” operating systems, along with threads and scheduler. Wrote device drivers for linux kernel.
- **OpenGL**– Learned OpenGL during the summer and created a mini arcade similar to space invader in C++ using interaction with mouse and keyboard, containing basic collision detection and circle strafe in Object Oriented Design.
- **Web Applications** – Designed and created several web database systems for web pages, using PHP, Perl, C#, SQL, AJAX. Modified open source forums to integrate with websites. www.aacfucsb.info, www.freestyleleague.com

Skills

Systems and hardware

- Labview, Matlab, ModelSim, VHDL, Verilog, SystemC, TTA-C, CAN, FlexRay, RTOS, Models of Computation, multi-core architectures, parallel processing, Real-Time systems.

Programming and software

- Languages: Java, C, C++, C#, SQL, UNIX shell scripting, PHP, Perl, XML, XHTML, AJAX, OpenGL, assembly, HTML, LaTeX, Network programming
- Courses: Computer Networking, Computer Security, Operating Systems, Database, Programming Languages

Bilingual

- Fluent in Mandarin, Chinese, able to read and write newspaper and articles.

Interests/ activities

- Secretary of Tau Beta Pi Engineering honor society Cal Sigma Chapter (2003)
- Member Eta Kappa Nu Engineering honor society Epsilon Tau Chapter (2002-2003)