

# BILL HUNG

1757 Oxford St. Apt. 1, Berkeley, CA 94709 (510) 705-8533 billhung@berkeley.edu

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## OBJECTIVE

Full-time Electrical Engineering (Hardware) position starting May 2006

## EDUCATION

B.S. Electrical Engineering and Computer Science Major

Graduating May 2006

**University of California, Berkeley**

Upper Division GPA 3.86 Overall GPA 3.93 (111 Semester Units)

## EXPERIENCE

### **President and Founder**

*Science and Engineering Association*

– Fall 2003

Invited speakers from Lockheed Martin Missiles and Space, Stanford Linear Accelerator Center (SLAC), and the Intel Museum to give seminars for 100 members and 10 officers. Increased the funding from \$100 to \$1,000.

### **Research Assistant**

*Berkeley Sensor and Actuator Center, UC Berkeley*

– Fall 2004

Developed the hardware and software of a portable Raman Medical Imaging System for Intel. The design, with the laser, is 15 times smaller than a commercial model.

### **College Senior Tutor**

*Internship at De Anza College*

– Year 2004

Mathematics, physics, chemistry, and circuit analysis tutor. Mentored 5 under-achieving students to achieve their academic successes. A paid internship that lasted for 1 year.

### **Undergraduate Researcher**

*Tohoku University Nano-Spin Center, Japan*

– Spring 2005

Tested a quantum computer with superconductor quantum theories. Handled superconductor at 0.04 Kelvin. Changed 100 liters of helium and nitrogen gas. Submitted final report in IEEE LaTeX format.

### **Exchange Student**

*Japan Engineering Program, Japan*

– Summer 2005

Presented verbal and written reports in Japanese. Achieved a 4.0 GPA in Japan. Received full scholarship.

### **Web Designer**

*Multiple Companies*

– Present

Program in PHP, SQL, CGI, and HTML. Develop websites for college club, private company, and my online profile and project experience at <http://www.billhung.net/career/marvell.htm>.

## PROJECTS

### **Network Broadcasting Digital Music Player on Field Programmable Gate Array (FPGA)** – Spring 2005

Designed a circuit using Verilog, which transformed music data stream from the network to the speaker connected to the FPGA board. Interfaced with the audio AC 97 chip and the Ethernet network ports.

### **Mixed Signal DC Stepping Motor Driver Circuit**

– Spring 2005

Designed a circuit to control the rotation of a DC Stepping Motor. The circuit controlled the speed and the direction of the rotation. Synchronized digital circuit that controlled the 5 Watt motor through 4 bi-polar amplifiers.

### **Transistor Level High Gain Amplifier**

– Fall 2004

Designed an amplifier with 1000 times signal gain, 2 milli-Volt to 4 milli-Volt input voltage, and 34 milli-Watt power consumption using CMOS.

### **CPU Design using Hardware Description Language**

– Fall 2004

Built a CPU using Verilog. Verified the CPU design with MIPS assembly instructions.

### **Analog Audio Equalizer Circuit**

– Summer 2004

Built an audio equalizer circuit for an MP3 player. Optimized the output frequency range, output amplitude, and attenuation level.

## COMPUTER SKILLS

**Operating Systems:** Unix (Fedora, Solaris, Knoppix), Windows XP/2000/NT/98/95/3.1, MS-DOS  
**Programming:** Verilog, C, C++, Java, XML, HTML, CGI, PHP, LaTeX, LabView, MIPS, SQL  
**Applications:** Spice, ModelSim, Matlab, Emacs, Spim, FTP, Photoshop, Visio, Frontpage, 3D Max

## ACADEMIC AWARDS

JASSO Scholarship (Spring 2005)

Faculty Association Scholarship (Spring 2004)

Student Body 4.0 GPA Scholarship (Fall 2003)

Carlolee Erickson Inter Club Council Scholarship (Fall 2003)

## OTHERS

Fluent in Japanese, English, and 3 dialects of Chinese including Mandarin.

F-1 student visa with a British passport. 1 Full Year of Work Authorization (OPT). Willing to travel.