

# Katherine S. Shigeoka

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## OBJECTIVE

Seeking a full time Electrical Engineering position in Control System Design

## EDUCATION

University of Utah  
BS/MS, Electrical Engineering (GPA 3.3)

Salt Lake City, Utah  
December 2006

## PROJECTS

Master's Thesis Proposal: Towards Flight Control of an Ornithopter Micro Air Vehicle. Semi autonomous flight control of an ornithopter micro air vehicle is researched and presented for velocity control and proposed for velocity plus altitude control.

Senior Design Project: Development of an Embedded Mechatronics System for Ornithopter Control. A low power, lightweight embedded system was developed on a TI MSP430 microcontroller to source/sink motors, sensors, and communication devices.

## COURSES

- Multivariable Systems
- State Space Methods
- Advanced Controls
- Control of Electric Motors
- Computer Design Lab: Microprocessor design modeled using Verilog and synthesized onto an FPGA board.
- Computer Architecture
- Software Radio
- Digital Signal Processing
- Embedded System Design
- Electronics I & II
- Wireless Communications Systems
- Fundamentals of Electromagnetics & Transmission Lines

## SKILLS

MATLAB, SIMULINK, Verilog-HDL, FPGA, IAR Embedded Workbench, AutoCAD, C, PSpice, dSPACE, Solaris, Linux, X/Windows, Mac OS, technical writing/documentation, oral communication

## RELATED EXPERIENCE

ECE Department, University of Utah  
Teaching Assistant

Salt Lake City, UT  
September – December 2005

- Teaching laboratory experiments and grading assignments for Control of Electric Motors
- Grading assignments and tests for Fundamentals of Electric Circuits

Metering Assets Engineering, PacifiCorp  
Intern

Salt Lake City, UT  
January 2003 – September 2004

- Complex metering for power plants and substations, meter programming, layout, and wiring details

Department of Biomedical Engineering  
Intern

Boston, MA  
June 1999 – September 1999

- Auditory neurology research, data entry, attendance of meetings and workshops

## ACTIVITIES

IEEE Member, snowboarding, rock climbing, and road biking  
Secretary of Engineering Student Government, Boston University

## EMPLOYMENT

Ichiban Sushi & Japanese Cuisine  
Waitress

Salt Lake City, UT  
May 2002 – November 2002

