ACSHI HAGGENMILLER

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EDUCATION

Yale University, New Haven, CT
Bachelor of Science, double major: Computer Science and Engineering Sciences – Mechanical
Graduation expected May 2017
Current GPA: 3.49 (Computer Science: 3.75)

RELATED EXPERIENCE

Social Robotics Lab Student Research Assistant, Fall 2016 – present
Working on a large collaborative project using robots to teach deaf infants sign language. Rewrote Maki robot Arduino motor controller for responsiveness and reliability. Prepared new control computer for integration testing with Gallaudet University. Improving behavior coordination and control software. (using C, Python, and ROS)

AccentTutor: Improved Second Language Acquisition with Phoneme Biofeedback, Spring 2016
Computer Science Senior Requirement Project
Wrote an application to analyze and visualize vowel pronunciation. (using C#)
Project paper and program files at https://github.com/acshi/AccentTutor

3d-Printed minimal cost Gear Box/Encoder, Fall 2015 – present
Designing and programming a 3D-printed gear box, motor controller, and encoders for robotic experimentation. (using C and OpenSCAD)
Project files are at https://github.com/acshi/EncoderGearMotor

Yale Intelligent Robotics, Fall 2015 – Spring 2016
Developed PID controller for an autonomous sailing robot and simulations for validation. (using Go and Python)

Yale Undergraduate Aerospace Association, Fall 2011 – Spring 2013
Programmed embedded Linux and Arduino platforms for data collection and control of high-altitude weather balloons. Developed Linux kernel drivers. (using C)

WORK EXPERIENCE

Center for Open Science, 210 Ridge McIntire Road, Ste 500 Charlottesville, VA 22903, 5/16/16 – 12/2/16
Development Intern
Added social sharing functionality to the Open Science Framework (osf.io). Began a project to rebuild the commenting system. (using Python, Ruby and Javascript)

goBlue Labs, 5 Science Park, New Haven, CT, Summer 2013
Software Development Intern
Developed software for the statistical analysis of EEG signals. Developed an Html5 multi-platform application for overcoming tobacco addictions through behavioral training. (using C and JavaScript)

Research Experience for Undergraduates, Hope College, Holland, MI, Summer 2012
Creating an Environment to Experiment with Security Threats
Developed realistic lab experiments for remote exploitation and password cracking. Presented a workshop at SIGSCE 2013, *Experiments With Network Security Threats in a Safe, Easy Sandbox.*

VOLUNTEER WORK

Revai, New Haven, CT, Fall 2015 – Spring 2016
Wrote control software for a new prototype Intestinal Preservation Unit biomedical device. (using C)

Missionary for The Church of Jesus Christ of Latter-Day Saints, Hong Kong, China, 9/18/13 – 8/14/15
Full-time, full immersion work. Mandarin speaking with some Cantonese.

OTHER

Language: Fluent and literate in Mandarin Chinese
Skills: C, Python, C#, Computer Security, Embedded Systems, 3D Printing, Basic Circuit Design
Github: http://github.com/acshi