

SAMUEL J. ETTINGER

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Experience

Associate, Robot Sapience Ltd. Dec. 2015 - Aug. 2016

- Designed programmable robots and wrote associated curricula for primary- and secondary-level comprehensive schools throughout Hong Kong
- Used programmable robots to lead classes in electronics, programming, geometry, logic, engineering design, and 3D printing
- Worked as researcher, tester, factory liaison, and teacher
- Cooperated closely with school administrators and teachers to influence education policies and improve school culture

Graduate Researcher, Cornell University Fall 2014 - Summer 2015

- Researched new control systems as part of the Verifiable Robotics Lab for NSF-funded project, "Provably Correct Reactive Control From Natural Language"
- Collaborated with Hong Kong University of Science and Technology to develop software interfaces for existing robot controllers, natural language parsers, and linear temporal logic (LTL) parsers

Graduate Researcher, GRITS Lab, Georgia Tech Fall 2012 - Fall 2013

- Developed a low-cost microscale airship drone for aerial swarm research
- Project confirms practical proficiency in mechatronic product design, design for manufacture, signal processing, differential geometry, and nonlinear control

Teaching Assistant, Johns Hopkins CTY Summer 2013

- Taught an intensive electronics class for talented youth, ages 14-16
- Program material approximates an undergraduate college course

Senior Clinic Student, Harvey Mudd College Fall 2011 - Spring 2012

- Analyzed and redesigned a commercial electronic IMU circuit for lifetime reliability on behalf of Northrop-Grumman, as part of a five-student team
- Drew from circuit analysis, materials science, and reliability engineering
- End-of-year presentation earned "Best Clinic Presentation" award

Clinic Developer, Harvey Mudd College Summer 2011

- Wrote tutorials to help students learn technical hardware and CAD/FEM software
- Created valuable lessons in 3D printing, PCB design, SolidWorks Analysis, and electronic testing procedures

Junior Clinic Student, Harvey Mudd College Fall 2010

- Developed electrical and mechanical subsystems for a novel liquid nitrogen flash freezer for producing ice pops
- Flash freezer was entirely conceived, prototyped, and tested by seven-student team
- Co-authored U.S. Patent #20130333404, "Safe and compact machine for rapidly producing frozen confections," published December 2013

Education

Master of Science in Electrical and Computer Engineering
Georgia Institute of Technology, Atlanta, Georgia
Graduated December 2013; Cumulative GPA: 3.7; Engineering GPA: 3.7

Bachelor of Science in Engineering
Harvey Mudd College, Claremont, California
Graduated with Honors May 2012; Cumulative GPA: 3.5; Engineering GPA: 3.7

Skills

Digital prototyping
Physical prototyping
Data analysis
Analog electronics
Digital electronics
Controls engineering
Circuit design
3D modeling
3D printing
L^AT_EX
Microsoft Office

Languages

English (Native)
Spanish
Java
Python
MATLAB
LabView