

# SAMUEL J. ETTINGER

Los Angeles:  
+1 (626) 429-4045

sam\_ettinger@hmc.edu  
SamE@spinmaster.com

## Experience

**Developer, Spin Master Studios**.....Nov. 2016 - Present

- Streamline and automate critical tasks in the development of app-connected toys
- Act as liaison between project managers, corporate managers, software developers, firmware developers, hardware designers, and QA teams

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

- Designed and taught robotics courses for primary- and secondary-level students at comprehensive schools throughout Hong Kong
- Used programmable robots of my own design to teach geometry, electronics, mechanics, programming, and logic
- Worked 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"
- Developed 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 system design/evaluation, CAD, circuit design, signal processing, differential geometry, and parameter adaptive 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

**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

**Clinic Student, Harvey Mudd College** .....Fall 2010, Fall 2011 - Spring 2012

- Developed 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
- 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

## 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  
Natural Language Processing  
Analog electronics  
Digital electronics  
Controls engineering  
Circuit design  
3D modeling  
3D printing  
L<sup>A</sup>T<sub>E</sub>X  
Microsoft Office

## Languages

English (Native)  
Spanish  
Java  
Python  
MATLAB  
Unity