Keegan Mann

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2371 Old Ranch Road
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Objective

Summer research involving hands on experience in electrical engineering or software.

Education

UC Berkeley, Electrical Engineering and Computer Science
Planned graduation spring 2014**;** GPA: 3.89

San Pasqual High School, Escondido CA
Graduated May 2011, GPA: 4.52 / 4.00

Employment

Undergrad Instructor, CS61A: The Structure and Interpretation of Computer Programs (2012-now)
- Taught discussion and lab sections for UC Berkeley's intro Computer Science class.

Reader for CS61A: The Structure and Interpretation of Computer Programs (Sp/Su 2012)

Intern at Northrop Grumman Corporation : Global Hawk Program (Summer 2011)
- Developed VBA applications for database interface and software management
- Developed a web-based tool for managing and automating the process of software peer review using MKS
- Experience in MS Access and MKS Integrity and Source

Tutor, San Pasqual High School, 12th grade year

Technical Skills

- **Python**, **Java**, **C/C++**, **Scheme**, and **SQL**
- Web development with **Django** framework, **CSS**, and **HTML**. Currently learning javascript/node.js/socket.io
- **Linux/UNIX** system administration including **Git**, **Apache**, **Postfix, Dovecot, etc**.
- **iOS** development in **Objective-C** (Macintosh Student Developers for OS X class)
- **Blender3D**, **Inkscape**, **Gimp**
- **PCB Design** with **Eagle** and **Surface Mount Devices**
- **Embedded/Microcontroller development** especially with the ATMEL toolchain

Additional Experience

Research at UC Berkeley Electrical Engineering Lab (Summer 2012-present)
- Developed an energy harvesting board for use with fuel cells which run on glucose and are implanted into beetles.
- Developed device to mount on dragonflies and locust which stimulates their ocelli with the eventual goal of being able to remotely control their flight. Development is ongoing.

Web Development for Clothing Startup (2012)
- Responsible for all web design and development
- Used Python/Django to create a custom shopping cart application
- Managed server which hosts the site

Pioneers in Engineering (2011-present): Robotics competition organized by Cal students
- Developed an SMD motor controller board, and collaborated on sensor boards

Self Balancing Autonomous Vehicle – Independent Research Project (2011)
- An investigation of different control algorithms and techniques
- Programmed an onboard microcontroller to run a cascaded PID controller.

FIRST Robotics Competition (FRC) (2009-2011)
- Founder and former president of FRC team at San Pasqual High School
- Developed all control software collaborating with other team members using Subversion

Honors:

Eta Kappa Nu: Berkeley Chapter (2012), Honor society for EECS students at UC Berkeley
Regents' and Chancellor's Scholar (2011): Top 2% of UC Berkeley Applicants
Intel international Science and Engineering Fair Finalist (2011)
Eagle Scout (2010): Led a group to design/build a trail kiosk for final eagle service project.
Dean's List Finalist (2010) Representing the San Diego FRC Regional