

# Kaylee Mann

## WORK EXPERIENCE

AUGUST 2012 - PRESENT

UC Berkeley

*Undergraduate Student Instructor (uGSI) for CS61A: The Structure and Interpretation of Computer Programs*

Taught discussion and lab sections for UC Berkeley's intro Computer Science class.

Also Taught discussion sections for the intro Electrical Engineering class for nonmajors (EE42/100).

Helped develop curriculum including exam questions and discussion worksheets.

MARCH 2012-PRESENT

UC Berkeley

*Research Assistant in Maharbiz Group*

Developed energy harvesting board for fuel cells which run on glucose and are implanted into beetles.

Designed a head mounted ocelli stimulation device for insects to enable remotely controlled flight.

— Device has been tested with Dragonflies, and Locust.

— Development ongoing.

Developed embedded software in C for a device to map the impedance of a surface wound, as it heals. Device has been tested in rats.

Helped design a low-cost, open-source pulse oximeter for underdeveloped areas of the world.

MAY-AUGUST 2011

Northrop Grumman

*Intern; Global Hawk Program*

The Global Hawk is a combat-proven high altitude military reconnaissance UAV.

Developed applications for database interface and software management.

Developed a web-based tool for managing and automating the process of software peer review.

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## EDUCATION

MAY 2015 **University of California Berkeley**  
*B.S. Electrical Engineering and Computer Science*

MAY 2011 **San Pasqual High School**  
HIGH SCHOOL DIPLOMA  
Escondido, CA

## PUBLICATIONS

2015 **A Wearable Wireless Platform for Optically Stimulating Neurons in Small Flying Insects. (Pending Review)**  
*First Author*

2013 **An ocellar-based flight control system for flying insects.**  
*In Acknowledgements\**

## SKILLS

PROGRAMMING	Python, Java, C/C++, Scheme, SQL
WEB DEV.	Django, HTML, CSS, $\LaTeX$
ARTISTIC	Blender3D, Inkscape, Gimp, Swing Dancing
HARDWARE	PCB Design & Fab with Eagle, Surface Mount Devices
EMBEDDED DEV.	Extensive experience with ATMEL and MSP430 devices
HUMAN LANGUAGES	English (native), Spanish (Proficient), Japanese (Beginning)

## PROJECTS

2011-2013 **PIONEERS IN ENGINEERING**  
Helped organize robotics competition for highschool students

2011 **SELF BALANCING AUTONOMOUS VEHICLE**  
Indep. research investigating different control algorithms

\* Acknowledged under different name