

Priscilla Chan
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EDUCATION

Bachelor of Science in Biomedical Engineering, emphasis on Medical Devices
University of California, Davis, Davis, CA | GPA: 3.5

Expected Graduation June 2019

EXPERIENCE

Research Assistant, **Daisuke Sato, Ph.D. Theoretical Cardiology Lab**, Davis, CA

Mar. 2017 – present

- Modeled action potentials with MATLAB and two sets of equations (Hodgkin-Huxley and Fitzhugh-Nagumo).
- Created a Python and Arduino code to model entrainment in fireflies utilizing LED lights, Raspberry Pi, circuit design, and a photosensor. Applied the system to the wheels of a toy car and experimented with motor movement to demonstrate machine synchronization.
- Utilized BioMetal fibers, shape-memory alloys, a Raspberry Pi, 8 channel mechanical relays, Solidworks, 3D printing, and soldering to model muscle contractions, the base of a creative toy car with flexible flooring.
- Used GitHub to manage the lab website and track project codes. Lab website: <https://dsatolab.github.io/Site/>

Research Assistant, **Tingrui Pan, Ph.D. MiNI Lab**, Davis, CA

Nov. 2017 – present

- Gathered data from lab fabricated pressure sensors by utilizing a digital manometer and LCR meter, then graphed and analyzed the data to test sensor accuracy.
- Conducted literature review to identify different sensors and their applications on measuring heart rate.
- Experimented on measuring heart rate from the foot by utilizing LabVIEW, National Instruments' NI Elvis Board II, operational amplifiers, and lab fabricated pressure sensors.

Intern, **Marjan Philhour for District Supervisor Campaign**, San Francisco, CA

Aug. 2016 – Sept. 2016

- Advocated for the election candidate by interacting with district residents at events and conducting phone calls in English and Cantonese.
- Uploaded citizen data into an online voter database and filmed an internship training video with a team of two other interns.

RELEVANT COURSEWORK

- **Electronic Circuits and Systems** Sept. 2017 – Dec. 2017
Analyzed Wheatstone bridges, operational amplifiers, filters, and digital logic circuits with National Instruments' Virtualbench and a Teensy Arduino. Accumulated this information to create a working photoelectric sensor that outputs a digital number from 1 to 9, each number corresponding to the intensity of light detected.
- **Programming in C Language** June 2017 – Aug. 2017
Learned C programming that culminated in the creation of a mazebuilder program that let the user turn a grid into a maze by breaking user desired grid walls. Codes on GitHub: <https://github.com/priichan/Mazebuilder-Program>
- **Engineering Computing and Visualization Using MATLAB** Oct. 2016 – Dec. 2016
Programmed a MATLAB audio file editor with a team of three students. The program allows a user to upload any audio file and edit the file using different effects. Codes on GitHub: <https://github.com/priichan/Audio-File-Editor>
- **Introduction to Biomedical Engineering** Oct. 2015 – Nov. 2015
Designed a portable device with a team of five students to help hemiplegic children tie their shoes using standard shoelaces.

CAREER DEVELOPMENT

Member, **Biomedical Engineering Club**, Davis, CA

Sept. 2016 – present

- Contributed to the club's research committee by advertising the 2017 undergraduate research symposium and facilitating registration.
- Promoted Biomedical Engineering at Engineering Day by speaking to high school students and facilitating a water balloon helmet activity.
- Mentored a newer member on biomedical engineering classes and career development.

CORE EXPERIENCE

Software: MATLAB, C, Python, Solidworks, LabVIEW, Raspberry Pi, Arduino, GitHub, HTML, CSS, Microsoft Office
Languages: English and conversational Cantonese