

PRISCILLA CHAN

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EDUCATION

Bachelor of Science in Biomedical Engineering, emphasis on Medical Devices
University of California, Davis, Davis, CA

Expected: June 2019

GPA: 3.45

TECHNICAL SKILLS

Technologies: HP Quality Center (QC), Microsoft Visual Studio (Professional and Community), SolidWorks, Autodesk Fusion 360, Raspberry Pi, Arduino, GitHub, LabVIEW, Fritzing, OpenViBE, Microsoft Office (Word, PowerPoint, Excel, Outlook)

Programming Languages: MATLAB, C, C++, C#, Python, HTML, CSS

WORK EXPERIENCE

Software Engineering Intern, Varian Medical Systems, Palo Alto, CA *June 2018 – Sept. 2018*

- Designed and implemented an application to configure the test environment for software verification using Windows Forms (GUI design) and C# object-oriented programming which reduced setup time up to 50%.
- Installed and configured software components in a test environment for software verification.
- Performed and executed manual test cases using HP Quality Center (QC) including smoke testing and acceptance testing on new released builds.
- Created new test cases in QC based off the software requirements.

Research Assistant, Daisuke Sato, Ph.D. Theoretical Cardiology Lab, Davis, CA *Mar. 2017 – present*

- Created a Python, MATLAB, and Arduino code to model entrainment in fireflies utilizing LEDs, Raspberry Pi, Arduino Uno, printed circuit board (PCB) design, and a photosensor. Applied the system to the wheels of a toy car to demonstrate machine synchronization.
- Designed a mechanical walking stick that utilized entrainment, SolidWorks, Arduino Nano, and an accelerometer to synchronize its vertical movement with human force.
- Utilized BioMetal fibers, shape-memory alloys, a Raspberry Pi, 8 channel mechanical relays, SolidWorks, 3D printing, and soldering to model muscle contractions, which was the base of a creative toy car with flexible flooring.
- Modeled action potentials with MATLAB and the Hodgkin-Huxley and Fitzhugh-Nagumo equations.
- Tracked project codes with GitHub. 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 analyzed the data to test sensor accuracy.
- Experimented on detecting and analyzing human gait by utilizing National Instruments' NI Elvis Board II, operational amplifiers, and lab fabricated pressure sensors.

CAREER DEVELOPMENT

Project Demonstrator, 2018 Annual College of Engineering Alumni Celebration, Davis, CA *Oct. 2018*

- Demonstrated how a SSVEP (Steady State Visually Evoked Potentials) BCI (Brain Computer Interface) worked by having 8 electrodes noninvasively attached to the head and utilizing OpenViBE software to convert brain electrical activity into actions in a computer game.

Project Presenter, 2018 UC Davis Annual Undergraduate Research Conference, Davis, CA *Apr. 2018*

- Presented Theoretical Cardiology Lab project on machine synchronization with a professional scientific poster.

Competition Participant, 2018 UC Davis Medical Make-a-Thon, Davis, CA

Jan. 2018

- Competed for 48 hours in a team of five. Used Autodesk Fusion 360 to design a device that produced custom immunodiffusion plates, which are used in Coccidioidomycosis diagnosis. Won the "Most Creative Team" award.

Website Designer, Code a Live Website Workshop, Davis, CA

Nov. 2017

- Attended a one-day workshop and implemented a professional website by utilizing bootstrap, HTML, and CSS.

Member, Biomedical Engineering Club, Davis, CA

Sept. 2016 – present

- Facilitated registration for the 2017 Undergraduate Research Symposium.
- Promoted Biomedical Engineering at Engineering Day by facilitating a water balloon helmet activity.
- Mentored a newer member on biomedical engineering classes and career development.