

PRISCILLA CHAN

pychan@ucdavis.edu | priscillag.chan@gmail.com

EDUCATION

University of California, Davis

Bachelor of Science in Biomedical Engineering, emphasis on Medical Devices | GPA: 3.43

Davis, CA

Graduated: June 2019

TECHNICAL SKILLS

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

Software: HP Quality Center (QC), Microsoft Visual Studio, Microsoft HoloLens, Unity, SolidWorks, Autodesk Fusion 360, Fritzing, LabVIEW, OpenViBE, Arduino, Raspberry Pi

Frameworks & Technologies: Pytest, Jinja2, Git, HPC Cluster Management, Trello, Jira, Windows OS, Mac OS, Linux Command Line

WORK EXPERIENCE

Roche Sequencing Solutions

Pleasanton, CA

Bioinformatics Intern

June 2019 – Present

- Developed a workflow management program for DNA sequencing software that assists in sample analysis and produces a web-based performance report. Technologies used include Python, Jinja2 template engine, HPC Cluster Management, HTML, and CSS.
- Designed an automated test to ensure the performance of new code releases by using Python programming and Pytest testing framework on Mac OS.

UC Davis Senior Capstone Project: Team RadAR with Varian Medical Systems

Davis, CA

Augmented Reality Developer

Aug. 2018 – June 2019

- Collaborated with three students and the UC Davis Cancer Center to develop a new method of streamlining patient positioning during radiation treatment for our client, Varian Medical Systems, by utilizing Microsoft HoloLens, Augmented Reality (AR), Microsoft Visual Studio, and Unity.
- Managed project development by using Jira, Trello, Gantt Charts, Design History Reports, and progress reports.
- Won the 2019 Most Innovative Design Award and the Sandia National Laboratories' Engineering Design Award.

Daisuke Sato, Ph.D. Theoretical Cardiology Lab

Davis, CA

Research Assistant

Mar. 2017 – June 2019

- Implemented artificial sensing of will and emotion in a machine-machine interface and in a human-machine interface by utilizing Python, MATLAB, C, C++, SolidWorks, Raspberry Pi, Arduino, and Fritzing.
- Modelled muscle contractions by utilizing circuitry and mathematical models (Hodgkin-Huxley, Fitzhugh-Nagumo).
- Presented lab projects at the 2018 and 2019 Annual UC Davis Undergraduate Research Symposium.

Varian Medical Systems

Palo Alto, CA

Software Engineering Intern

June 2018 – Sept. 2018

- Designed an application on Windows OS 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%.
- Executed test cases using HP Quality Center (QC), including smoke testing and acceptance testing on new builds.
- Created new test cases in QC based off software requirements.

CAREER DEVELOPMENT

Biomedical Engineering Club

Davis, CA

Member

Sept. 2016 – June 2019

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

Annual UC Davis Medical Make-a-Thon

Davis, CA

Competition Participant

Jan. 2018 & 2019

- 2018: Competed for 48 hours in a team of five and designed a device that produced custom immunodiffusion plates for Coccidioidomycosis diagnosis. Won the "Most Creative Team" award.
- 2019: Designed an eye-dropper device that aids patients with ophthalmic conditions or lack of dexterity.

2018 Annual College of Engineering Alumni Celebration

Davis, CA

Project Demonstrator

Oct. 2018

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