XIYAN (HENRY) MAI

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EDUCATION

Bachelor of Science in Biomedical Engineering.　GPA: 3.56
University of California, Davis　Expected graduation date: March 2020

SKILLS

- SolidWorks CAD
- MATLAB signal analysis and modelling
- Circuit Python and C++ for electrical projects on Arduino and Raspberry Pi
- Metal machining and laser cutting

- PCB design and assembly
- 3D printing with Formlabs
- MS Office: Word, Excel, and PowerPoint
- Chinese Calligraphy

EXPERIENCE

Undergraduate Research Assistant, Sato Lab, *UC Davis School of Medicine Pharmacology*, Nov 2018-current
- Modelled cardiac action potentials with Hodgkin-Huxley Equations in MATLAB.
- Built and programmed electronic fireflies that synchronized with each other while blinking.
- Utilizing ferrofluid to develop flexible stiffness-varying material.
- Designing a smart walking stick that would assist in lifting based on user's walking rhythm.

Radiology intern, Ambulatory Care Center, *UC Davis Medical Center*, July-Sept 2018
- Greeted and directed patients to X-ray rooms. Maintained CR cassettes.
- Learned basic diagnosis of bone defects and observed the designs of artificial joints from X-ray films.

Team VisuAll member, UC Davis Engineering Senior Design, Jan-June 2019
- My team designed a portable, non-mydriatic retina screening device.
- Transformed design ideas into hand-drawn models.
- Programmed the screening process with Python on Raspberry Pi and designed PCB.
- Performed failure mode and effects analysis on final prototype.

OUTREACH

Temporary English Instructor, Ba-Tang Elementary School of Yushu, China, 2013
- Volunteered as an English instructor after the 2010 local earthquake.
- Gave lessons to students from grade 3 to grade 6 and managed PE classes.
- Understood more about the responsibility that a teacher carried and experienced the joy of helping people in need at the same time.

LEADERSHIP

President, Chinese Calligraphy at UC Davis, June 2017 – Current
- Arranged annual Spring Festival Calligraphy Sale on UC Davis campus.
- Performed calligraphy and sold works created by club members to students and professors.

Travel Coordinator, UC Davis Table Tennis Club, Sept 2016 – June 2019
- Organized travel for the Table Tennis school team before each tournament event.

AWARDS

UC Davis College of Engineering Dean's Honor List, Spring 2016
Sacramento Table Tennis Spring Open Team Event 1st place, 2016
Sacramento Table Tennis Fall Open Under-900RR 2nd place, 2016
Sacramento Table Tennis Fall Open Under-2400 Doubles 1st place, 2016