

Danessa Yip

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EDUCATION

University of California, Irvine

Bachelor of Science in Biomedical Engineering, *cum laude*

June 2020

GPA: 3.806

RELEVANT SKILLS

- SolidWorks (CSWA)
- Microsoft Suite
- MATLAB
- LabVIEW
- Python, C/C++, Java, PHP, JavaScript
- Supply Chain Management
- Cell Culture

WORK EXPERIENCE

Applied Medical

Rancho Santa Margarita, CA

Group Process Development Engineering Intern

Jun 2019 – Sep 2019

- Developed new test methodology for use in design verification (DV) testing of dense material, compressive/tensile load, and product fitment for graspers and scissors.
- Performed Test Method Validation on products to ensure that they passed quality standards
- Collected and analyzed data from tests such as the tissue transparency test.
- Designed test fixtures in SolidWorks for better usability ensuring ease of use and repeated accuracy during DV testing.
- Collaborated with other engineers and updated SolidWorks and CAD drawings for subassemblies for the Epix probes and pin holding fixture for the compressive load test.
- Routed documents through an electronic document management system (eDMS).
- Presented data findings to supervisor and a PowerPoint presentation focusing on a fixture.

PROJECTS

AER Handheld Filtration System – Patent Pending

Sep 2019 – Present

- Collaborated with 5 student engineers to design a working AER Handheld Filtration System resulting in a US patent.
- Designed reports and performed quality checking on project submissions, including ensuring that the filtration stick meets the standards for the design.
- Performed a failure mode analysis and risk assessment for the filter.

Luo Lab, UCI Department of Biomedical Engineering

Irvine, CA

Research Assistant

Oct 2017 – Sep 2019

- **Mob1-Lats Protein Project:** Created scripts using Bash and C-shell languages to decrease simulation run time allowing for analysis of larger data sets associated with amino acid reactions. Designed programs in Python code that would allow for analysis of hydrogen bonds between each amino acid.

Hirschberg Lab, Beckman Laser Institute, UCI

Irvine, CA

Research Assistant, Project Lead

Dec 2016 - Sept 2017

- Subcultured and treated macrophages and tumor cells with PDT/PCI laser treatment and dispensed gold spheroid nanoparticles with photosensitizers and chemotherapy drugs.
- **“Sonochemical Internalization (SCI): A New Modality for Focused Ultrasound Site-Specific Enhanced Gene-Directed Enzyme Prodrug Therapy”:** Designed the mechanical setup for monitoring tumors with sonochemical ultrasound and the insertion of plasmids.
- Awarded an \$1800 UROP Fellowship from this project.

LEADERSHIP ACTIVITIES

- Treasurer and Industrial Relations for Alpha Eta Mu Beta Honor Society Jun 2017 - 2018
- Vice President of Scholarship for Phi Theta Kappa Honors Society Jan 2015 – Jun 2015
- Secretary for Circle K International Sept 2014 – Jun 2015