

# CONNIE YU

Berkeley, CA • [yuconnie.com](http://yuconnie.com) • (415) 969-1929 • [yu.connie@berkeley.edu](mailto:yu.connie@berkeley.edu)

## EDUCATION

### University of California, Berkeley – Bachelor of Science – Dec 2018

- **Bioengineering** major, **Mechanical Engineering** minor (GPA: **3.92/4.0**)
- **Coursework:** Biomechanics, Planar Dynamics, Designing for the Human Body, Mechatronics, Microprocessor-Based Mechanical Systems, Instrumentation in Biomedicine, Properties of [Bio]Materials, BioMEMS

## WORK EXPERIENCE

[suitX](#) 01/2019 – present  
*Mechanical Design Engineer* Emeryville, CA

- Design (SolidWorks), assemble, and test prototypes of future powered lower-limb exoskeletons
- Document and consolidate drawings for patent of own original design
- Create test jigs for fatigue cycling of mechanical components in current products

[Sohn Lab](#), Department of Mechanical Engineering, UC Berkeley 09/2016 – 12/2018  
*Undergraduate Engineering Researcher* Berkeley, CA

- Develop and prototype point-of-care exosome-based cancer diagnostic device using photo/soft lithography
- Design (AutoCAD), fabricate, and test microfluidic devices for iterative prototyping, experimentation, and data analysis (MATLAB, COMSOL) to ensure functionality

[Abbott Laboratories](#) 01/2018 – 08/2018  
*Manufacturing Engineering Co-Op* Pleasanton, CA

- Designed, characterized, and validated new production process controls for manufacturing optimization of HeartMate 3 Left Ventricular Assist Device (LVAD)
- Optimized epoxy potting process, resulting in six-fold reduction in process time and new durometer process control
- Simulated (COMSOL) fluidic diffusion as proof-of-concept for new helium leak testing procedure of hermetic welds, with estimated ten-fold ROI in the first year

[Aesculap Implant Systems](#) 05/2017 – 08/2017  
*R&D Engineering Intern, Customized Instruments* Breinigsville, PA

- Modified existing surgical instruments and prototyped designs from abstract concept per surgeon request
- Created engineering models and drawings (CATIA) and collaborated with in-house machinists for manufacturing
- Documented instrument information in DHFs according to 21 CFR 820, especially handling functional test verification and product risk identification and mitigation (keywords: 510(k), FMEA, GMP, QSR, GD&T: ASME Y14.5-2009)

[Niemz Lab](#), Keck Graduate Institute 06/2016 - 08/2016  
*Engineering Design Intern* Claremont, CA

- Designed and fabricated prototypes of components for fluidic point-of-care tuberculosis diagnostic device using CAD (SolidWorks) and CNC milling (Roland MDX-40)
- Created custom testbeds and experiments to characterize, assess, and improve component performance
- Optimized component designs for injection molding manufacturability and assembly scalability for cost reduction

## SKILLS

- **Fabrication:** CNC machining (mill, waterjet), manual mill and lathe operation, injection mold design, laser cutting, 3D printing, photo/soft lithography, woodworking, electronics (KiCad, Arduino, Raspberry Pi, IoT – programming in Python, C)
- **Software:** SolidWorks, CATIA V5, AutoCAD, COMSOL, MATLAB, Adobe Creative Suite, LabVIEW

## HONORS AND EXTRACURRICULARS

- [Instructables \(Autodesk\) Featured Author](#): 100 projects, 40 contest wins, over 1.6 million views
- **Tau Beta Pi:** Engineering honor society, coordinated Intro to Engineering course at UC Berkeley with ~150 students
- **Hobbies:** indoor/outdoor rock climbing, running, woodturning (volunteer instructor at [Lower48](#)) and woodcarving