# Jonathan Mi

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## Education

**University of California San Diego**                                                          **Aug 2019 – Jun 2023**
B.S. Electrical Engineering | Minor: Economics                                                          GPA: 3.94

## Work Experience

**Electrical Design and Systems Engineering Intern**
*Boeing Flight Controls Service Engineering Team* • *Seal Beach, CA*                **Jun 2022 – Present**
- Actively respond to flight controls and proximity sensing systems service requests from Boeing airplane operators across all Boeing Commerical Airplane models and Military Derivatives
- Directly engage with operators to identify and diagnose aircraft issues including time sensitive aircraft on ground (AOG) situations
- Work with design and quality engineers to analyze and propose solutions to electrical manufacturing discrepancies and safety issues for service letters and bullutins

**Robotics Research Intern**                                                                     **Jun 2021 – Oct 2021**
*Johns Hopkins University Terradynamics Lab* • *Baltmore, MA*
- Designed two multi-functional legged robots capable of traversing complex terrain using CAD, 3D printing, laser cutting, and Python
- Performed terrain traversal probability experimentation using Matlab and Python
- First author of research paper presented at 2022 IEEE ICRA Conference and earned Outstanding Locomotion Award Finalist award
- Earned Best Presentation Award in final showcase out of 20 total JHU interns

**Computer Vision Intern**                                                                       **Jan 2020 – Jun 2021**
*UCSD Video Processing Lab* • *San Diego, CA*
- Collected data from test subjects and performed data analysis on human eye motion
- Developed computer vision systems using Matlab and Python to mimic human eye motion
- Utilized CAD, 3D printing, and laser cutting to produce low-cost computer vision test stands
- Co-author of research paper presented at the 2021 ISOCC Design Conference

**Prototyping Intern**                                                                           **Aug 2019 – Jun 2020**
*Qualcomm Institute – UCSD Division of Calit2* • *San Diego, CA*
- Designed and developed 3D models using Solidworks, 3D printers, laser cutting, manual and CNC machining, and PCB soldering for campus research groups
- Utilized metals, plastics, and composites to manufacture robust and low-cost prototypes
- Noteworthy projects included a 5 DOF underwater robotic arm for an oil pipe inspection ROV robot, open-source hearing aids, and rat behavior mazes

## Leadership & Extra Curriculars

**Technical Mentor – *First Robotics Team 3647 & 6901***                                **Jan 2020 –  Present**
- Create and present lesson plans to teach design, CAD, and CAM skills to high school students

**Technical Lead – *First Robotics Team 3647***                                          **Jun 2016 – Jun 2019**
- Led robot design and construction throughout the build and competition seasons
- Managed both CAD and build teams, consisting of over twenty people of varying skill levels

## Certifications

**Certified SOLIDWORKS Professional (CSWP – Mechanical Design)**                          **Oct 2019**
Dassault Systems | Credential ID: C-M34T5WK7EN

## Technical Skills

- **Electronics:** KiCAD, Cadence, PCB Soldering, SPICE Modeling
- **Computer-Aided Design (CAD):** Solidworks, Onshape
- **Computer-Aided Manufacturing (CAM):** HSMWorks, Fusion 360 CAM
- **Machining:** Manual Mill/Lathe, CNC Mill and Router, 3D Printing, Laser Cutting
- **Programming:** Matlab, Python, Java, C++, Arduino