# Jonathan Mi

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## Education

**University of California San Diego**     **Aug 2019 – Jun 2023**
B.S. Electrical Engineer | Minor: Economics     GPA: 3.94
Relevant Course Work | Digital IC Design, Active Circuit Design, Linear Control Theory, Power Systems

## Work Experience

**Electrical Design Engineer**
*Shield AI • San Diego, CA*     **Jan 2023 – Present**
- Utilize Altium Designer and SPICE modeling tools to prototyping and design complex electrical circuit board assemblies for autonomous drones and fixed wing UAV
- Conduct design review and verification of complex analog and digital circuit boards
- Create production test platforms for product verification

**Electrical Design and Systems Engineering Intern**
*Boeing • 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 to be published in service letters and bulletins

**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

**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

## Leadership, Extra Curriculars

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

**Technical Lead – *First Robotics Team 3647***     **Jun 2016 – Jun 2019**
- Led 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

- **Electrical Design:** Altium, KiCAD, Cadence (gpdk045 technology), LTSpice, PSpice
- **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