# HARRYCHOWJACKSON.github.io

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HOME 2218 Schott Ct, Santa Clara, California

Robotics engineer with electrical engineering industry experience, flexibility in startup environments, and a lifetime of DIY projects. Outcome-oriented team contributor with excellent interpersonal skills. I have a passion for building with my hands.

#### **EXPERIENCE**

# NASA Ames - Airborne Sensors Facility

Moffett Field, CA 06/2019 - 01/2020

Electrical Engineer

- Supported NASA's multispectral imagers (eMAS, MASTER, and PICARD) for Earth Science research - designed, reviewed, and built for integration on airborne platforms.
- Worked with technologies including vacuum systems, cryogenic temperatures, high altitude proofing (ingress protection), and very low noise signal conditioning.
- Designed mechanical solutions and drawings with Solidworks, considering design for manufacturability

# Smart Wires - R&D Facility

Union City, CA 09/2017 - 02/2019

Santa Cruz, CA

Laboratory Engineer

- Designed and assembled test harnesses for qualifying power transmission devices, including thermal, frequency, and impulse response
- Optimized thermal and electrical performance by creating and executing experiments, and incorporating analyzed results in design process
- Created large electrical assemblies; from theory/design to manufacturing phases, while considering design for manufacturability, environmental sealing, and FCC standards
- Debugged mechanical, electrical, and programming issues in PCB and controller prototypes, using oscilloscopes and surface mount soldering tools.

# **EDUCATION**

# University of CA, Santa Cruz

Robotics Engineering B.S.

06/2011 - 06/2017 • Senior Design Project: Drone communication security payload, to protect endangered species monitors from poachers. Collaborated with NASA and DoD.

- Vice President of Student IEEE Branch grew from ~5 to 30+ regular members
- Held a program manager position on Residential Life staff, creating college-wide community building events
- Led a peer mentorship program for at-risk youth

#### SKILLS & INTERESTS

### **PROGRAMMING**

ROS, C, C++, Python, LabVIEW, FPGA Logic design. Microsoft Office; intermediate at Excel.

CAD/3D

Solidworks, Autodesk Fusion 360, Blender, Allegro PCB, EAGLE

### **OTHER**

- Machine shop
- Electrical lab/debugging tools
- 3D Printing, rapid prototyping
- Origami