

HARRYCHOWJACKSON.github.io

PHONE (415)816-1077

E-MAIL harrychowjackson@gmail.com

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

Electrical Engineer

06/2019 - 01/2020

- 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

Laboratory Engineer

09/2017 - 02/2019

- 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

Santa Cruz, CA

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

Git, 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