

ANTHONY DRABECK

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PROFESSIONAL EXPERIENCE

Mechanical Ground Systems Engineering Intern

Summer 2020

Northrop Grumman

- Improved efficiency by creating department wide Catia assemblies for commonly used hoisting hardware
- Presented Design Review for reusable drawings to over 10 senior engineers

Engineering Intern

Summer 2019

Saratech

- Automated extensive standard parts database using Visual Basic code in Siemens NX
- Developed user friendly algorithms to generate Excel sheets for driving model dimensions

Engineering Teaching Assistant

September 2019 – April 2020

UC Irvine

- Taught 30 students drone design, fabrication, machine shop skills, and CAD fundamentals

PROJECTS

Founder and President

September 2019 – Present

UC Irvine Bike Builders

- Secured necessary funding and strategically led over 20 novice members
- Managed design and fabrication techniques for first bicycle frame

Modular Bike Frame Welding Jig

Winter 2020

- Created modular design using 8020 aluminum extrusions and precision locating features
- Integrated MS Excel with SolidWorks to verify jig design using 20 different bicycle geometries
- Utilized efficient top-down design techniques to transition from rough idea to finished product

Thermal Management

January 2019 – January 2020

UC Irvine Cube Satellite Team

- Developed simple and elegant heating element solution with a control circuit
- Devised accurate and repeatable method for bending thermally conductive wire using 3D printed tooling

Machinist's Hammer

May 2019

- Manufactured multiple brass and aluminum hammers featuring knurled and threaded handles

Team Lead

September 2018 – March 2019

UC Irvine Drone Project

- Directed design team to achieve successful flight capable of dropping payload autonomously

SKILLS

Fabrication

- Manual mill
- Manual lathe
- TIG/MIG Welding
- Laser cutting
- 3D printing
- Woodworking
- Fiberglass layup

Software

- Siemens NX
- Catia
- SolidWorks
- Visual Basic

Certifications

- MATLAB/Simulink
- Java, C++, Arduino
- Eagle Circuit Design
- Excel
- Solidworks Associate
- Lean Six Sigma – White Belt

EDUCATION

University of California – Irvine

September 2018 – June 2022

- B.S. Mechanical Engineering, 3.4 GPA Dean's List