

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

Chief Engineer (In-training)

September 2020 – Present

UC Irvine Rocket Project

- Led team to successful static test fire of bipropellant cryogenic liquid oxygen and liquid methane engine
- Overseeing launch vehicle design team to ensure feasibility/manufacturability of rocket structure
- Responsible for physical manufacturing of all parts (machining and welding)

Founder and Project Manager

September 2019 – Present

UC Irvine Frame Building Project

- Working with professor to develop multi-material frame using additive manufacturing
- Secured over \$3,000 in funding and strategically led over 20 members
- Managed design and fabrication techniques for brazed road bicycle frame
- Designed and machined modular welding fixture for bicycle frames

UC Irvine Cube Satellite

January 2019 – January 2020

Thermal Management

- 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

SKILLS

Fabrication

- Manual mill
- Manual lathe
- TIG/MIG Welding
- 3D printing
- Oxy-acetylene brazing
- 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 – Winter 2022

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