

# ANTHONY DRABECK

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## PROFESSIONAL EXPERIENCE

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### 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

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### UC Irvine Rocket Project

September 2020 – Present

Propulsion and Test Engineer

- Currently designing method for measuring propellant tank fill levels
- Manufactured and retrofitted engine mount using manual mill and MIG welding

### UC Irvine Bike Builders

September 2019 – Present

Founder and President

- 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

### 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

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### 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

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### University of California – Irvine

September 2018 – Winter 2022

- B.S., Mechanical Engineering, 3.3 GPA Dean's List