

# Burton Yale, III

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Scan Me!

## **OBJECTIVE:**

Actively seeking an internship position where my skills and expertise can fully be utilized, as well as challenge and expand my current knowledge in the field of Aerospace Engineering.

## **EDUCATION:**

**Cal Poly Pomona** **Pomona, CA** **September 2015 - December 2020**  
Bachelor of Science, Aerospace Engineering (Core GPA: 3.71/4.0 | Overall GPA: 3.59/4.0)

## **EXPERIENCE:**

**Panasonic Avionics** **Lake Forest, CA** **June 2019 – August 2019**  
Certification Engineering Intern:

- Conducted Structural, Environmental, Smoke/Leak, and Cooling tests and identified failures
- Generated Flammability, Structural, Environmental, Smoke/Leak, and Cooling reports
- Coordinated with various engineering groups (Electrical & Mechanical Engineering) to help evaluate a new set of materials for Line Replacement Units (LRUs) that are compliant with FAA, EASA, and OEM requirements

**Cal Poly Pomona** **Pomona, CA** **February 2019 – Current**  
Research Assistant | JPL MALTO Project

- Adapted JPL's Mission Analysis for Low Thrust Optimization program for new JPL users & college students
- Streamlined complicated optimization graphical elements while enhancing original functionality
- Designed user experience to simplify the process designing low thrust missions
- Created a system to catalog and organize the ~300 variables that the optimizer utilizes
- Provided a modular backend to allow for future development and MALTO updates

## **PROJECTS:**

**Friends of Amateur Rocketry 1030 (FAR 1030) Competition Team** **September 2018 – June 2019**

- Won 1<sup>st</sup> Place out of 4 teams, including San Diego State University and University of Central Florida, in competition by launching to 23,749 ft on a completely student-built rocket
- Coordinated with and aided aerodynamic, structure, and manufacturing teams
- Engineered a mounting system for fins to withstand supersonic conditions
- Manufactured carbon fiber and fiberglass skin for sub-scale and full-scale rocket

**Ceres Sample Return** **August 2018 – December 2018**

- Utilized MATLAB to find an optimal Earth-Mars-Ceres trajectory using porkchop plots & cost functions
- Through the role as Team Lead, evaluated and analyzed MATLAB results to plan and present a trajectory that was in compliance with mission requirements

**MATLAB Dynamics Plotting Toolbox** **January 2019 – July 2019**

- Developed an open-source toolbox for MATLAB to support the plotting of vector dynamics problems in order to assist understanding in students new to the subject.

## **SKILLS:**

**Coding Languages:** MATLAB | Julia | Git | LaTeX | HTML/CSS | Python

**Computer Skills:** Microsoft Access | CAD | AGILE PLM | JIRA

**Engineering Skills:** Software Design | Composites Manufacturing | Systems Engineering

## **AWARDS/HONORS:**

**President's List (Cal Poly Pomona)**

- Received for outstanding work ethic and achieving a school-year GPA of 3.5 or higher
- Awarded in: Academic Year 2018-2019 (Year 4)