Burton Yale, III

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OBJECTIVE:

Looking for an internship position where I can fully utilize my expertise, as well as challenge and expand my current knowledge in the field of Aerospace Engineering.

EDUCATION:

Cal Poly Pomona **September 2015 - December 2020** **Pomona, CA**

Bachelor of Science, Aerospace Engineering (Core GPA: 3.71/4.0 | Overall GPA: 3.59/4.0)

EXPERIENCE:

Panasonic Avionics **June 2019 – August 2019** **Lake Forest, CA**

Certification Engineering Intern:

- Conduct Structural, ENV, Smoke/Leak, and Cooling tests and identify failures
- Generate Flammability, Structural, ENV, Smoke/Leak, Cooling, and ATP test reports
- Work with various engineering groups (Electrical Engineering, Mechanical Engineering & Electro-Magnetic Interference) to help evaluate selection of new materials for Line Replacement Units (LRUs) that are compliant with FAA, EASA, and OEM requirements

Jet Propulsion Laboratory & **February 2019 – Current** **Pasadena, CA**
Cal Poly Pomona JPL MALTO Research

Researcher:

- Adapting JPL's Mission Analysis for Low Thrust Optimization program for use in undergraduate studies
- Used MATLAB to recreate the current GUI in order to be better understood by engineering students
- Gained understanding of the FORTRAN backend which handles the optimization and analysis

PROJECTS:

- **Friends of Amateur Rocketry 1030 (FAR 1030) Competition Team**
  - Won 1st Place in competition by launching to 23,749 ft on a completely student-built rocket
  - Worked in aerodynamic, structure, and manufacturing teams
  - Designed mounting system for fins to withstand supersonic conditions
  - Manufactured carbon fiber and fiberglass skin for sub-scale and full-scale rocket
- **Ceres Sample Return**
  - Used MATLAB to create an optimizer to find optimal Earth-Mars-Ceres using porkchop plots & weighting functions
  - As Team Lead, I evaluated MATLAB results to plan and present a trajectory that meets mission goals
- **MATLAB Dynamics Plotting Toolbox**
  - Created an open-source toolbox for MATLAB to help plot vector dynamics problems to help cement understanding in students new to the subject.

SKILLS:

MATLAB	Simulink	SolidWorks/CAD	Microsoft Office	Software Design
Python	HTML/CSS	Systems Engineering	UI/UX Design	Composites Manufacturing

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)

MEMBERSHIPS & AFFILIATIONS:

Member, Undergraduate Missile Ballistics and Rocketry Association (UMBRA)