

THOMAS CHESTER

www.thomaschester.space

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EDUCATION

Arizona State University
Ira A. Fulton School of Engineering
B.S.E. Mechanical Engineering

Expected Graduation: May 2019
GPA: 3.3 out of 4.0
Dean's List Spring 2017

EXPERIENCE

Masten Space Systems

Fall 2017

Intern - Mojave, CA

- Assisting with the testing and maintenance of multiple Vertical Takeoff/Vertical Landing (VTVL) liquid propulsion rockets, as well as the development and testing of the Broadsword 25,000lbf 3-D printed engine
- Spending 50% of time working as a ground crew member for flight testing operations and 50% of time working with engineers on in-depth technical projects which are crucial to the flight vehicles and engines

Orbital ATK, Inc.

Summer 2017

Senior Engineering Intern - Promontory, UT

- Materials & Processes Design Engineering department in the Propulsion Systems Division: Solid rocket booster development for NASA's Space Launch System
- Developing and testing the propellant liner and insulation system's relevant properties and characteristics
- Material characterization and analysis, engineering test plans & reports, Digital Image Correlation and Structured Light work, engineering test performance & evaluation, and solid modeling with NX

Qualastat Electronics, Inc.

Summer 2016

Intern - Chandler, AZ

- Assembled and tested fiber optic cables and cable assemblies for various customers
- Strength tested cables, used SolidWorks to design and 3D print cable bend outlines, assisted in the optimization of the manufacturing process, and learned the mechanical design aspect of the cables

LEADERSHIP & ACTIVITIES

Fulton Undergraduate Research Initiative

August 2016 - May 2017

Undergraduate Researcher

- Ongoing university-sponsored research project focused on developing a sounding rocket to record data on fin flutter in order to determine the ideal fin geometry for reducing flutter
- Worked alongside Daedalus Astronautics to develop experimental rocket motors for the test flights

Daedalus Astronautics ASU

August 2014 - Present

Solid Propellant Team Lead

- Lead a team of 8 members on different projects throughout each academic school year, focusing on the testing and development of solid rocket propellant
- Organize and lead propellant strand burning and mixing in preparation for live static test fires
- Participated in multiple team-built competition rocket launches and hybrid rocket propellant research projects

SKILLS

Software/Languages

MATLAB, NX, SolidWorks, HTML, LaTeX, Python (Beginner), Excel

Hand Tools/Machine Shop

Mill, lathe, 3D printing, laser cutting, band saw, welding, soldering