

# THOMAS CHESTER

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## EDUCATION

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**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

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### **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 LOX/Methane engine
- Working 50% of the time as a ground support member for flight testing operations and 50% with engineers on crucial, in-depth technical projects relating to the flight vehicles and engine development programs

### **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

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### **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

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**Software/Languages**  
**Hand Tools/Machine Shop**

MATLAB, NX, SolidWorks, LaTeX, Python, Excel with VBA, HTML5  
Mill, lathe, 3D printing, laser cutting, band saw, welding, soldering