# THOMAS CHESTER

www.thomaschester.space 2173 W Spruce Drive Chandler, AZ 85286 (909) 557-8897  $\diamond$  Thomas.E.Chester@asu.edu

#### **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

Intern - Mojave, CA

Fall 2017

· 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**