

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: 3.32 out of 4.0
Dean's List Spring 2017

EXPERIENCE

SpaceX
Test Operations Engineering Intern - McGregor, TX

Summer 2018

- Upcoming internship in the Dragon Test department working on Dragon and Crew Dragon hypergolic propulsion system test operations, development, and design
- SuperDraco launch abort engine and Draco ACS engine acceptance and qualification testing/analysis

Masten Space Systems
Engineering Intern - Mojave, CA

Fall 2017

- Gimbal development and analysis for the Broadsword 25,000lbf 3D-Printed methalox dual expander cycle engine
- Ground Support for test operations such as Xodiac flights and Broadsword hot fires/cold flows; duties include cryogenic propellant loading, test equipment setup, vehicle inspections, and on-site repairs
- Test stand development for an electronic pump motor liquid nitrogen cooling jacket
- In-house software development for gimbal and injector design

Orbital ATK
Senior Engineering Intern - Promontory, UT

Summer 2017

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

LEADERSHIP & ACTIVITIES

Daedalus Astronautics ASU
Liquid Propulsion Team Lead

August 2014 - Present

- Leading a team on the design and build of a liquid rocket engine capable of hot fire test operations by Spring 2018
- Formerly led a team of 8 members on different projects focused on the testing and development of solid propellant
- Organized and led propellant strand burning and mixing in preparation for live static test fires
- Participated in multiple team-built competition rocket launches and hybrid engine research projects

Fulton Undergraduate Research Initiative
Undergraduate Researcher

August 2016 - May 2017

- 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

SKILLS

Software/Languages
Hand Tools/Machine Shop

SolidWorks, NX, MATLAB, Python, ANSYS, Excel w/ VBA, GFSSP
Mill, lathe, 3D printing, laser cutting, band saw, welding, soldering