THOMAS CHESTER

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EDUCATION

Arizona State University — Expected Graduation: May 2019
Ira A. Fulton School of Engineering — GPA: 3.32 out of 4.0
B.S.E. Mechanical Engineering — Dean's List Spring 2017

EXPERIENCE

SpaceX — Summer 2018
Test Operations Engineering Intern - McGregor, TX

- Working in the Dragon Test group on Dragon and Crew Dragon propulsion system acceptance and qualification test operations
- SuperDraco hypergolic launch abort engine tests and Draco hypergolic attitude control thruster tests

Masten Space Systems — Fall 2017
Engineering Intern - Mojave, CA

- 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 — 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
- 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 — August 2014 - Present
Liquid Propulsion Team Lead

- 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 — August 2016 - May 2017
Undergraduate Researcher

- 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 — SolidWorks, NX, MATLAB, Python, ANSYS, Excel w/ VBA, GFSSP
Hand Tools/Machine Shop — Mill, lathe, 3D printing, laser cutting, band saw, welding, soldering