# Kasey Webster

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*Mechanical Engineer with experience in computer simulations and analysis, computer programming, and manufacturing. Problem solver with a passion for learning new things and initiative to seek out answers and deploy robust solutions.*

## Education

**Brigham Young University** *Provo, UT*

Master of Science: Mechanical Engineering *2015*

- Thesis: Using STAR-CCM+ to Evaluate Multi-User Collaboration in CFD

**Brigham Young University** *Provo, UT*

Bachelor of Science: Mechanical Engineering *2012*

## Experience

**Raytheon Missile Systems** *Tucson AZ*

Manufacturing - Mechanical Engineer *June 2015 - Present*

- Created and deployed Raytheon Missile Systems wide automated template for identifying key characteristics in manufacturing and quality control processes. Created all training documents and organized training classes.
- Created and deployed templates used by all Raytheon business units for automating both the creation of model based Technical Data Packages and completion of First Article Inspections.
- Created automated HTML template for Model Based Work Instruction which uses Creo API to include interactive 3D models, and saves time generating work instructions.

**Brigham Young University** *Provo UT*

Graduate Research Assistant *Jan 2013 - April 2015*

- Realized 35% reduction in Computational Fluid Dynamics (CFD) set-up time through optimization of the process of multi-user collaboration process.
- Presented multi-user research to CFD industry leaders and developers at STAR Global Conference in March 2014.
- Developed code to create parametric connection between collaborative CFD and collaborative CAD programs

## Skills

### Computational Fluid Dynamics – STAR-CCM+

- Flow in multiple regions: conjugate heat transfer, external flow, cooling flow through jet engine turbine, and CFD on moving bodies.
- Model set-up, mesh generation, solving on a supercomputer.
- Macro generation using Java and STAR-CCM+ API.

### Multi-User CAE and CAE Development

- Star-CCM+: Collaboration used to improve analysis model set-up and geometry preparation.
- NX-Connect: Parametric modeling through collaboration of multiple users (based on NX PLM software).
- NX Open API: Use API to interface with CAE software – NX, STAR-NX, STAR-CCM+, ANSYS, i-Sight, HyperMesh, and Leap Motion.

### Web, Adobe Acrobat, and Microsoft Office Development

- Website design using HTML, JavaScript and jQuery, and CSS.
- Developed web pages for work and personal use.
- Adobe Acrobat templates created using JavaScript and Creo APIs.

### Spanish Speaking

- Professional Working Proficiency.

## Awards and Certification

Jan 2016 **Raytheon**, Raytheon Six Sigma - Specialist *Tucson*

Oct 2017 **Raytheon**, Up And Coming Award *Tucson*

Dec 2017 **Raytheon**, Excellence in Operations and Quality *Tucson*

## Hobbies

**Mountain biking, reading, skiing, traveling**