

Kasey Webster

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Mechanical Engineer with experience in mechanical design and analysis, coding, and manufacturing. I love to learn new things and possess the initiative to seek out knowledge in order to improve the projects I am working.

Experience

Boeing

Everett WA

ELECTRICAL SUBSYSTEMS DESIGN AND ANALYSIS ENGINEER

Jun 2019 - Present

- Create system level requirements for avionics systems using Matlab, Simulink, and DOORS.
- Scaled Agile Framework Scrum Master responsible for leading multiple teams in new product development.

Raytheon Missile Systems

Tucson AZ

MANUFACTURING - MECHANICAL ENGINEER

June 2015 - June 2019

- Used Creo engineering software (Creo Parametric, Creo Illustrate, Creo CoCreate, Windchill) to bring Raytheon inline with industry standards and DOD requirements for Model Based Definition and develop manufacturing standards for all Raytheon business units.
- Created interactive Bill of Materials, Bill of Characteristics, and FMEA following AS9103 standards, using Model Based Definition with a digital thread to upstream and downstream processes, to be used by over 300 Manufacturing and Quality Engineers.
- Created PDF First Article Inspection template for interactive 3D models with Adobe Acrobat and JavaScript to automate supplier testing and establish a Model Based Enterprise. Used for development programs and all future Raytheon Missile System products.
- Created automated HTML template for Model Based Work Instruction for Raytheon products built using 3D models. Uses Creo API to include interactive 3D models, which reduces the LOE for creating work instructions and improves operator experience.
- Designed and organized training for teaching 3D Modeling and 3D printing to Manufacturing Engineers.

Brigham Young University

Provo UT

GRADUATE RESEARCH ASSISTANT

Jan 2013 - April 2015

- Collaborated with STAR-CCM+ engineers, BYU, and National Science Foundation to realize a 35% reduction in Computational Fluid Dynamics (CFD) set-up time through optimization of the process of multi-user collaboration.
- 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
- Worked with complex CFD models including Conjugate Heat Transfer and models with multiple regions.

Education

Brigham Young University

Provo, UT

MASTER OF SCIENCE: MECHANICAL ENGINEERING

2015

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

BACHELOR OF SCIENCE: MECHANICAL ENGINEERING

2012

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.

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.
- 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