Kelsey L. Calvert

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EDUCATION

University of Washington – Seattle, WA B.S. Aeronautical Engineering
GPA: 3.4/4.0 June 2017

Previous Coursework – Drafting and CAD Design, Statics, Linear Algebra, Mechanics of Materials, Thermodynamics, Waves and Optics, Scientific Computing (MATLAB)

Planned Coursework (2015-2016) – Orbital mechanics, Atmospheric Flight Mechanics, Aerospace Instrumentation, Calculus IV, Structural Vibrations, Aerospace Structures, Aerodynamics, Propulsion

EXPERIENCE

TEAGUE – Everett, WA June 2015 – September 2015

Technical Design Intern

- Created full-scale design prototypes in support of the 777x, including structural supports and attachments
- Extensive use of SolidWorks for true to specification modeling, including surface work
- Collaboration with CNC and build specialists to prepare designs for machining and construction
- 70% of time as intern billed toward official Boeing projects

TEAGUE – Everett, WA June 2014 – September 2014

Mechanical Design Intern

- Developed 3D Printing techniques for internal prototyping resulting in wider adoption for design validation
- Performed basic structural and static analysis of industrial design electronic flight bag concept
- Created and maintained CATIA V5 master models for framework in support of 777x design studies
- Designed and created full CAD assembly and working prototype of linear feedback prototype device

Formula SAE – University of Washington, Seattle September 2013 – September 2014

Composites Research and Development

- Tasked with creating a new radiator ducting system to improve cooling and engine performance
- Designed and analyzed parts using Solidworks and ANSYS resulting in improvements in weight and airflow
- Extensive analysis resulted in 30% increase in cooling capacity with 20% reduction in power draw
- Named the “Design MVP” for Team 25

ACTIVITIES

Design, Build, Fly – University of Washington, Seattle November 2014 – Present

- Member of Aero/Astro Engineering student organization building a UAV to compete internationally
- Part of the design team, modeling, analyzing, and validating structures and aerodynamics
- Placed in charge of UAV flight testing, selection of test components and analysis of test flight data

PROFESSIONAL SKILLS

- *Engineering Design* – Experience in CATIA V5, and over 600 industry hours in SolidWorks CAD
- *MATLAB* – Experience using MATLAB for data analysis and matrix algebra operations
- *Computational Fluid Dynamics* – Introductory experience using ANSYS FLUENT to analyze aerodynamics
- *Additive Manufacturing* – Experienced in use of 3D printing for iterative design validation
- *Manufacturing* – Experience in Carbon Fiber layup, CAM, and preparation of designs for CNC machining
- *Aerospace* – Knowledge of layouts, guidelines and practices within the Aerospace industry
- *German Language* – Intermediate working proficiency, with extensive cultural knowledge and immersion