Kelsey L. Calvert

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EDUCATION

University of Washington, Seattle *B.S. Aeronautical Engineering*
GPA: 3.56/4.00 *June 2017*
Past Coursework – Vibrations, Aerodynamics, Thermodynamics, Flight Mechanics, Aerospace Structures, Propulsion, German, MATLAB
Planned Coursework (2016-2017) – Finite Element Analysis, Control Theory, Composites, Advanced Flight Mechanics, Flight Test, Japanese, Aircraft Design Senior Capstone

EXPERIENCE

Boeing – Everett, WA
777 Liaison Engineer Intern *June 2016 – September 2016*
- Introduced to Boeing standard manufacture, test and repair procedures for aircraft currently in production
- Experienced in solving emergent production issues, and navigating the quality and documentation process
- Aided in studies to streamline and simplify Material Review Board analysis of common shear-tie defects

TEAGUE – Everett, WA
Technical Design Intern *June 2015 – September 2015*
- Created full-scale design prototypes in support of the 777X, including structural supports and attachments
- Extensive use of SolidWorks for true to specification modeling and design, including surface work
- Collaboration with CNC and build specialists to prepare designs for machining and construction

Mechanical Design Intern *June 2014 – September 2014*
- Developed 3D Printing techniques for internal prototyping, resulting in wider adoption for design validation
- Created and maintained CATIA V5 master LOPA models for framework in support of 777X design studies
- Designed and created full CAD assembly and preliminary prototype of linear feedback prototype device

PROJECTS

AA 322 Junior Project – Flying Wing UAV Concept Design *Spring Quarter 2016*
- Designed and evaluated an original flying wing UAV design as part of a five-student team
- Investigated effects of winglet sweep on stability, correlating increased stability with increased sweep-back
- Results proved the aircraft to be both dynamically stable, and able to provide enough lift for flight

UW Formula Motorsports – Radiator Cooling Ducts *September 2013 – September 2014*
- Tasked with creating a new radiator ducting system to improve cooling and engine performance
- Designed and analyzed parts using SolidWorks and ANSYS FLUENT/Star-CCM+
- Extensive analysis resulted in increased cooling capacity with 20% reduction in power draw

UW Design, Build, Fly – Participant, Design Team Co-Captain *November 2014 – June 2016*
- Elected as Design Co-Captain of the UW Design, Build, Fly team for the 2015-2016 international competition
- Led design of the 2015-2016 transport aircraft, designed to internally carry a fully functional smaller aircraft

PROFESSIONAL SKILLS

- **Aerodynamics** – Knowledge of aerodynamic theory and design, including wind-tunnel testing and CFD
- **Engineering Design** – Experience in CATIA V5 and ANSYS, and over 600 industry hours in SolidWorks CAD
- **Additive Manufacturing** – Experienced in use of 3D printing for iterative design validation
- **Manufacturing** – Experience in standard Boeing manufacture, repair and documentation methods
- **German Language** – Intermediate working proficiency, with extensive cultural knowledge and immersion