John Vandermeulen

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US Citizen

Education

Clemson University Clemson, SC
Bachelor of Science in Mechanical Engineering, Minor in Mathematical Sciences December 2025
Master of Science in Mechanical Engineering (Thermal and Fluid Sciences) December 2026
GPA: 3.48/4.00

Work Experience

Gulfstream Aerospace Corporation Savannah, GA
Vendor Project Engineering Co-op May 2025-August 2025

- Developed and executed DO-160 compliant test plans for vendor-supplied aircraft components, including the design of custom test fixtures using CATIA
- Authored 28 technical supplemental reports to support airworthiness of vendor parts
- Completed over 20 hours of continuous improvement training, earning Yellow Belt certification

Stress Engineer Co-op Aug 2024-Dec 2024

- Verified structural compliance of 14 custom G700 interior components with FAA Part 25 regulations by coordinating with design engineers and FAA representatives
- Performed conservative stress analysis and hand calculations to validate new designs against existing stress reports
- Generated new FEMAP based stress analyses and FAA approved reports, supported by Excel VBA automation

Baseline Design Engineer Co-op Jan 2024-Apr 2024

- Completed an intensive, 40-hour advanced CATIA training program
- Designed 37 new workflows including new custom interior asset designs as well as amendments to old engineering using CATIA, AutoCAD, and PLM software Enovia SmarTeam
- Worked on long term project to design a new standard interior asset for the G700 program using Catia, Kaizen walks, and weekly presentations with management

Skills

- CAD & FEA: CATIA, SolidWorks, AutoCAD, FEMAP
- Aero & Thermal Tools: XFOIL
- Programming: MATLAB, VBA
- Software and PLM: Excel, Word, PowerPoint, ENOVIA SmarTeam

Specialized Projects

- Composite Layup Optimization: Laminate Theory, Tsai-Wu Failure, MATLAB Automation
- Turbojet Engine Optimization: Cycle Analysis, Compressor/Turbine Matching
- Heat Transfer Tool & Steam Engine Design: Thermal Modeling and Mechanical Analysis
- Vacuum Bin Optimization: Suction Performance Modeling, Pressure-Area Scaling
- Aircraft Design Project: Aerodynamics, Performance, and Stability Sizing