

Graham Grable

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Education

University of Georgia

Bachelor of Science in Mechanical Engineering, August 2018

Cumulative GPA: 3.63/4.0 (Magna Cum Laude)

- Relevant Classwork: Engineering Mathematics, Circuits, Statics, Dynamics, Numerical Methods, Thermodynamics I & II, Materials, Heat Transfer, Linear Systems, Feedback Control, Strength of Materials, Machine Design, Mechanical Systems, Sensors & Transducers, Finite Element Analysis, and Vibrations.

Work Experience

Student Project Lead

Thermoelectric Cooling for Small Satellites Project, University of Georgia, (August 2016—Current)

- Led initial team to develop project from theory to working proof-of-concept design in four months.
- Demonstrated 50% increase in signal-to-noise ratio using a 66% smaller package than state-of-the-art.
- Designed cooling system using quality function deployment methodology, Autodesk Inventor, and ANSYS.
- Developing feedback control algorithm with Simulink to optimize power consumption.

Co-Founder and Project Engineer

Scientific Space Systems, LLC, Athens, GA (December 2016—March 2018)

- Designed and tested Bluetooth enabled telescope prototypes with Fusion 360 and 3D printing.
- Defined and tracked telescope requirements and subsystem interfaces through development.
- Tracked operations in accordance with applicable local, state, and federal rules and regulations.
- Won second place at UGA Summer Launch Program for product and business model.

Chief Student Systems Engineer

Small Satellite Research Laboratory, University of Georgia, (September 2015—February 2018)

- Led a team of 40 engineers building small satellites on the University of Georgia campus, including MOCI (AFRL, UNP-9) and SPOC (NASA, USIP-2).
- Used STK to plan payload and communication operations, resulting in a 38% reduction in mission time to meet expected outcomes.
- Verified and validated NASA, AFRL, mechanical, electrical, and software requirements & constraints for 8 system readiness reviews, including preliminary design review (PDR) and flight selection review (FSR).
- Designed requirement compliant satellite subsystems with Autodesk Inventor.
- Analyzed satellite thermal, inertial, modal, and response spectrum performance with ANSYS, Thermal Desktop, and MATLAB.

Skills & Accomplishments

Skills: Autodesk Inventor, ANSYS, Thermal Desktop, MS Office, LabView, MATLAB, Simulink, Python, STK, SysML, Project Management, Trade Studies, Configuration Management, Concept of Operations, Strategic Planning, Client Relations, Interface Control, System Verification, Milestone Reviews, & Risk Management

Accomplishments:

- Co-author of seven conference proceedings and one conference paper (available upon request).
- Passed Georgia Mechanical FE Exam, July 2018.
- College of Engineering Merit Award for Research, University of Georgia, April 2018.
- University Nanosatellite Program Flight Selection Review Winner, Albuquerque, NM, January 2018.
- Second Place Winner at College of Engineering Senior Capstone Showcase, Athens, GA, April 2017.
- Third Place Winner at AIAA Region II Student Conference, Starkville, MS, March 2017.
- Technician Class Amateur Radio Operator (KM4VFJ), July 2016.
- Summer 2016 Research Fellowship, University of Georgia, May 2016.
- Intern Research Symposium Grand Prize Winner, University of Georgia, December 2013.
- Eagle Scout, November 2009.