

# Cameron Eure

cameroneure.com    US Citizen    AIAA Member    ceure3@gatech.edu    linkedin.com/in/cameron-eure/

## EDUCATION

### Georgia Institute of Technology | Atlanta, GA

Doctor of Philosophy in Aerospace Engineering, GPA: 3.28/ 4.0      Expected May 2027  
Master of Science in Aerospace Engineering, GPA: 3.28/ 4.0      Aug 2024-May 2025  
Bachelor of Science in Aerospace Engineering (BSMS Program), Honors, Minor in Physics, GPA: 3.09/ 4.0      Aug 2020-May 2024

## EXPERIENCE

### Vehicle Performance (AE 3330) Graduate Teaching Assistant      Jan 2025-May 2025

- Assisted course with grading and feedback for coursework for a junior level Aerospace Engineering course

### NASA Langley Research Center Hypersonic Airbreathing Propulsion Branch | Hampton, VA      Jun 2024-Aug 2024

- Ported and conducted tests on hypersonic CFD software, VULCAN-CFD from Fortran to C++ with ITAR vehicle designs for verification on the usability and capability of the new program to be able to run on GPU supercomputers
- Reduced memory usage by 10% using diagnostics & revised and created beginner module for software with graphic examples
- Revised code by incorporating LAURA for the ability to process combustion reactions & 5,7, and 11 species flows
- Simulated supersonic combustion for scramjets using k-omega and SA turbulence models with updated species libraries

### NASA Ames Research Center Aeromechanics Branch | Moffett Field, CA      Jun 2023-Aug 2023

- Worked as a research associate on conceptual design for a crewed rotorcraft to be operated on Mars
- Tested and optimized through the implementation of ~1000 lines of MATLAB code for Mars rotorcraft configurations
- Identified the minimum power required using MATLAB for various helicopter configurations in hover flight
- Designed Mars mission using moon architecture relation and viewed possible protocols for final conceptual design
- Derived helicopter dynamics and investigated possible usable airfoils and materials for blades on Mars

### Aerothermodynamics (AE 4080) Undergraduate Teaching Assistant      Aug 2023-Dec 2023

- Assisted 70 students with grading and feedback for coursework for a senior level Aerospace Engineering course
- Translated gas flow equilibrium program library written in C++ into MATLAB for ease of use for students and project

## RESEARCH & PROJECTS

### Hypersonics RTD&E Vertically Integrated Project Thermal Protection Systems Lead      Jan 2025-Current

- Coordinating with other sub team leads in efforts for developing Hypersat to assist the hypersonic initiative at Tech
- Designing and conceptualizing a testing facility to perform sonic fatigue tests for materials to be used in hypersonic environments.

### Aerospace Systems Design Laboratory (ASDL)      Aug 2024-Dec 2024

- Performed and implemented systems engineering methods to design a lunar sample return and national energy security

### High-Power Electric Propulsion Laboratory (HPEPL)      Jan 2023-May 2024

- Automated power supply voltage and current by creating LabVIEW VIs for an electrode structure
- Assisted in assembling desiccator boxes by utilizing pressurized nitrogen gas tanks for storage

### Aerothermodynamics (AE 4080) Final project      November 2022

- Calculated stagnation point heating of a hypersonic vehicle using MATLAB for various supersonic speeds and calculated aerodynamic coefficients for a set of given angles of attack

## STUDENT-LED ORGANIZATIONS

### Georgia Tech Supersonics Club      Aug 2023-current

- Designing and building through procedural design processes to create the supersonic RC plane.
- Perform structural simulations with CAD to create framework for plane.

### Yellow Jacket Space Program      Jan 2022-Jan 2024

- Worked on LOX processing and feed system simulation using Simscape and Simulink to view current capabilities for system

## SKILLS

**Software:** MATLAB, SolidWorks, MS Office, Adobe Premier Pro, Arduino, Latex, Mathematica, Python, C/C++, RotCFD, AFTGen, Simulink, Simscape, Siemens NX, Labview, ANSYS STK, TecPlot, LINUX, ParaView, Command Line, JSON schema, VULCAN-CFD, JMP, OpenMDAO, Git, MBSE, COMSOL

**Languages:** English (Native), French (Proficient), Japanese (Intermediate)

**Courses:** Aerodynamics, System Dynamics, Controls, Vehicle Performance, Aerothermodynamics (Hypersonics), Circuits & Electronics, Material Science, Jet & Rocket Propulsion, Orbital Mechanics, Structural analysis, Wind Engineering, Kinetics, Gas Dynamics, Aircraft Design, Systems Engineering

**Interests:** Hypersonics, Fixed Wing Aircraft Design, Propulsion, Thermal systems, Entry Descent and Landing, Numerical Methods, Aerothermodynamics, Propulsion, Combustion, Gas Dynamics, Guidance Navigation & Control, Systems Engineering

**Leadership:** SEDS@GT—President (2023), GT Astronomy Club—PR officer (2023), GT IFC— Vice President of Programming (2024), Phi Kappa Tau Alpha Rho—Social chair (2024), Scholarship Chair (2025)