Thomas Meyer

tm676@cornell.edu (706) 424-3240

EDUCATION

Cornell University, College of Engineering, Ithaca, NY — Expected Graduation: **May 2027**
Bachelor of Sciences in Mechanical Engineering • Minor in Aerospace Engineering — Current GPA: 3.76 • SAT: 1560
Honors: Meinig Family Cornell National Scholars, Cornell University — August 2023-Present

COURSEWORK

Chemistry • Multivar Calc • Lin Alg • Mat for Energy Sys • Obj-Oriented Prog & Data Struc • Physics E&M • Statistics • Thermodynamics • Statics & Mech of Solids • Differential Eqns • Dynamics • Intro to Mechanical Design • Mech of Eng Materials • Oscillations, Waves & Quantum • System Dynamics • Intro to Aeronautics • Intro to Fluid Mechanics

RELEVANT EXPERIENCE

Ashlawn Energy — **June 2025-Present**
Mechanical Engineering Intern — *Vestal, NY*

- Calculated effects of viscosity on back pressure in the stack and ran pressure tests on the full stack cell assembly
- Designed and assembled a conductivity probe to measure the conductivity of cell membrane at discrete points
- Set up and calibrated Laser cutter and software as well as gold plating experimental setup to manufacture parts
- Developed CAD model for single cell prototype to model the system and cut new precise gaskets to prevent leaks

Cornell University Autonomous Drone Project Team (CUAD), Cornell University — **September 2023-Present**
Mechanical Engineering Subteam — *Ithaca, NY*

- Engineered drone using both machined and 3D printed parts to attempt quadcopter speed Guiness world record.
- Designed and assembled motor mounts, attachments and detachable legs for Carrier Drone with 150lb payload
- Tested component parts including grippers using Arduino programming to test servos through an Arduino board.
- Collaborated across different sub-teams to attach the electrical components and develop code to fly the drones.

Huisken Lab, Department of Physics, Georg-August-Universität Göttingen — **June-July 2024**
Research Intern — *Göttingen, Germany*

- Designed and prototyped a new base plate compatible with any stage configuration for the Flamingo microscope.
- Developed a mounting adaptor for the rotational stage to better the stability and decrease error in the imaging.
- Created and printed a different adaptor and baseplate to fit another rotational stage for imaging large samples.
- Formulated a system of labeling and sorting cables to facilitate the assembly of new Flamingo electronics boxes.

Amikka Learning — **July 2024-Present**
Test Prep Tutor — *Remote*

- Taught Math and English for both the ACT and SAT to help students prepare for the college application process.
- Designed individually targeted lesson plans to help each student maximize their potential and meet their goals.
- Evaluated students' progress and adjusted lessons based on feedback and tested performance of each student.
- Coached students on efficient testing techniques and methods for solving difficult problems and managing time.

Department of Physics, University of Georgia — **June-August 2021**
Volunteer Research Intern — *Athens, GA*

- Used a linear array (CCD chip) to build a circuit to upgrade a monochromator to Ultraviolet-Visible spectrometer.
- Built circuits to provide correct voltages to the chip & used Python to generate plots to display collected data.
- Collected and plotted data from transient absorption experiment to measure time-resolved absorption spectra.
- Organized tools, electronic parts, and other lab components to facilitate a more productive work environment.

SKILLS & INTERESTS

CAD & Design: Autodesk: Inventor, Fusion 360, Auto CAD, DWG TrueView; SOLIDWORKS; PTC: Onshape, CREO;
Coding & Analysis: MATLAB, Simulink, Python, Matplotlib; Java; ANSYS (Beg), NASTRAN (Beg); LabVIEW, LaTex, Excel
Prototyping: 3D Printing; Laser Cutting: Falcon Design Space; CNC Routing; Gold electroplating; Machine Shop;
Other: ANSYS Granta; Arduino; Autodesk Design Review; Circuit Design (Elementary); Canva; CapCut; First Aid; CPR
Languages: German (Fluent); Mandarin (Limited Working Proficiency); Spanish (Limited Working Proficiency)
Interests: Aerospace, Energy, Robotics, Tech, Running, Soccer, Frisbee, Cycling, Reading, Piano, Swimming, Hiking