

Alan Munschy

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EDUCATION

Cornell University

August 2023 – Dec 2026

Bachelor of Engineering, Mechanical Engineering

Ithaca, NY

- Relevant Coursework: Thermodynamics, Statics, Differential Equations, Linear Algebra, Mechanics & Special Relativity, Oscillations & Waves, Programming with Python, Object Oriented Programming & Data Structures

EXPERIENCE

Cornell University Autonomous Drone

Sep 2024 – Present

Mechanical Team Member

Ithaca, NY

- Simulated a ~**300-mph drone** with Real Flight Evolution and **Blender** modeling.
- Coordinated with CS team to implement software in the loop with my model using **INAV**.
- Designed and printed drone parts according to specifications with **Onshape** and **OrcaSlicer**.

Cornell Bowers Course Staff

Aug 2024 – Present

Teaching Assistant (CS 1110- Intro to Programming with Python)

Ithaca, NY

- Manage a **40-student lab** section with python exercises twice a week.
- Hold consulting hours twice a week for programming assignments and questions.
- Coordinate in a team of other consultants and assistants to plan class sections.

Founder Camp // TurboDMV

June 2023 – Aug 2023

Cofounder

Miami, FL

- Startup camp taught by Eliam Medina, a Y-Combinator Alum, where teams built startups.
- Created TurboDMV, a service that makes going to the DMV easy by **web scraping appointments**.
- Did over \$400 in sales and won a **\$1500 prize** for best startup.

Cornell Residential Life Team

Aug 2024 – Present

Residential Advisor (RA)

Ithaca, NY

- Organize and lead monthly **events for 270 residents** with the RA team.
- Help residents with the transition to college life, showcase available campus resources.
- Conduct semester RA chats with residents to promote community inclusivity.

PROJECTS

Ansys Codefest

September 2024

- Minimized cost of a 95-node dwarven bridge model by **50%** in 8 hours.
- Used **PyAnsys** to programmatically determine the cheapest cross section and material combination that each beam can have without going over its yield stress.

Nocturne – Won **2nd place** (out of 41 teams) for lifestyle solutions in the 2024 BigRedHacks Hackathon

Vividly – Won **1st place** (a \$500 prize) for the software solutions track in the 2024 RCareWorld Hackathon

- Nocturne and Vividly are mobile apps made with **React Native + Flask**. I worked mostly on front end.

SKILLS & TECHNOLOGIES

- **Skills:** CAD, Finite Element Analysis, Simulations, 3D Modeling, Optimization, Full Stack Web Development
- **Technologies:** Fusion, AutoCAD, Onshape, Blender, Ansys, PyAnsys, Matlab, Python, Java, TypeScript, SQL