



# Ian Lisien

1st-year at The Pennsylvania State University  
Majors in Chemical Engineering and Plant Sciences

Second semester university student interested in gaining hands-on experience in plant and agricultural sciences research.

## Education

**The Pennsylvania State University (Schreyer Honors College)**  
GPA: 3.95/4.0  
credits: 20 current / 90 completed  
Cell and Mol. Biology, Horticulture, etc.

**Community College of Allegheny County (independent)**  
Dean's List 2023-25  
transfer credits: 27  
Organic Chem. 1 & 2, Botany, etc.

**University of Pittsburgh (dual enrollment)**  
transfer credits: 12  
Af. American Lit., Music, Rhetoric, etc.

**Pittsburgh Science and Technology Academy**  
Valedictorian, Chief Science Officer  
WGPA: 4.4 / 4.0 SAT: 1530  
(AP) transfer credits: 32

## Software

- Proficiency with **Office** programs including Word, Excel, and PowerPoint; with **Creative Cloud** softwares including Photoshop, Premiere, Illustrator, and Indesign; as well as with **LaTeX, Blender, and Inkscape**

- **Engineering software** experience in FreeCAD, Onshape, Fusion, and COMSOL

## Research Experience

**Cortex Modelling** with Davidson Lab at Pitt (initially with Hillman Academy) (June 2023 - August 2025)  
- Redesigned and extended a **computational model of cortical actin-myosin biomechanical interactions** to improve performance, extendability, and multi-cortex simulation

- Worked in a professional academic research laboratory environment.

**Gene Team Program** with Richards-Zawacki Lab at Pitt (June - July 2022)  
- Collaborated with a team of peer students to analyze anti-fungal properties of frog slime peptides  
- Learned biological **wet-lab techniques** and protein folding dynamics  
- Professionally presented findings

## Leadership Experience

**Kalliope (literary magazine)**  
Art Editor (January 2026 - present)  
- Worked within production during FA25 semester in the design of Folio 2025  
- Organization of Art Committee meetings, efforts to ensure deliberation over pieces is fair, representative of club values

**SciTech Science Olympiad**  
Founding Member, Captain (Winter 2022 - June 2025)  
- Successfully led individual event teams + full-organization logistics  
- Competed effectively in team's inaugural year  
- Personally fundraised ~\$3000 for 2024-25 season

**Scouting America Troop 109**  
Eagle Scout, Senior Patrol Leader (2018 - August 2025)  
- Designed and led the assembly of a nearly 600 sqft irrigation system in school garden for Eagle Scout project  
- Led planning, execution of monthly camping trips, weekly meetings, community service, rank advancement, etc. for a troop of ~20 scouts

**SciTech Garden Club**  
Ground Cover Lead (Winter 2023 - June 2025)  
- Led project aiming to replace parts of grassy areas with native / edible plants in school garden  
- Assisted with general tasks: cleanup, removal of invasives, etc.

## Technical Skills

- Fluency with **Python** and **Julia** for data analysis, mathematics, and modelling; experience with Java, MATLAB, and R  
- Extensive basic **front end web design** experience (HTML/HTMX, CSS), as well as Django, Flask, and Wagtail for **server side** code

- Experience with version control, code notebooks: **Git / GitHub**, Jupyter, Pluto.jl

- Appalachian plant identification

- Basic biological **wet-lab** (dilutions, gel electrophoresis, PCR, etc.) and **computational modelling** experience

- Additive manufacturing, woodshop, textile shop, metal shop

## Volunteering

**Science Olympiad at Penn State**  
- Co-wrote 60+ question test activity for the Oceanography event

- Seamlessly executed fair delivery of the aforementioned test activity for event with more than 50 middle and high school teams

## With Scouting America Troop 109

- Stream / park cleanups, invasives removal, tree planting / care with Upstream Pittsburgh, Pittsburgh Parks Conservancy, State Parks, and Scout Camps