

# Dagny Lott

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Personal Website: <https://dagnylott.com/>

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## EDUCATION UNIVERSITY OF PENNSYLVANIA

BS Candidate in Mechanical Engineering, May 2024 GPA: 3.73

Covid Gap Year: 2020-21 Academic Year

Activities: Teaching Assistant for ENGR 105 (Mostly MATLAB, some Python/Arduino)  
Penn Club Ultimate Frisbee, *Fitness Captain* (Fall 2021 National Qualifiers)  
Mechanical Engineering Oriented Peer Advisor

Coursework: Statics and Strength of Materials • Intro to Mechanical Design • Programming Languages and Techniques I • Intro to Scientific Computing

Spring 2022: Dynamics • Thermodynamics • Machine Design & Manufacturing (design and manufacture a Stirling engine) • Analytical Methods for Engineering

## EXPERIENCE HALE THERAPEUTICS

Summer 2021

*Mechanical Engineer Intern*, Philadelphia, PA

- Generated ISO 13485 documents from scratch for handheld medical device (Li-ion battery powered), including: the verification/validation plan, FMEA reports, risk management procedures, and requirements traceability matrix
- Streamlined assembly process and optimized design changes for injection-molded plastic and metal parts (with tolerances of 0.06mm) using rapid prototyping techniques

## M&M FAMILY SCHOOL

Spring 2021

*Mathematics & English Teacher (Volunteer)*, Colombia, South America

- Taught calculus, physics, lower-level math, and English to students and teachers in rural Colombia for 30 class hrs/week
- Prepared students for their Cambridge Checkpoint Examinations

## TEMPLE ALLEN INDUSTRIES

Fall 2020

*Mechanical Engineer Intern*, Rockville, MD

- Developed the mechanical design, analysis, and marketing material of a new semi-autonomous electro-pneumatic surface abrasion prototype for key MRO and OEM clients
- Collaborated with the production and engineering team to model and create drawings in SolidWorks of a system that would validate new, million-dollar subsystems and software
- Spearheaded the design and construction of test fixtures to improve quality control of pneumatic parts

## SWARTHMORE SWIM CLUB

Summers 2016 - 2020

*Assistant Manager* (Part-Time, 2020) / *Lifeguard and Swim Instructor* (2016 – 2020) / *Water Show Director* (2017 – 2018)

- Progressed through every employee position, gaining larger managerial responsibilities
- Produced the annual musical: led weekly practices and dress rehearsals for cast of 35+

## SKILLS

Applications: SolidWorks, MATLAB, Java, HTML, CSS, JavaScript, Arduino Boards  
Manufacturing: Rapid Prototyping, 3D Printing (SLA & FDM), Laser Cutting, Soldering

## INTERESTS

Boardgames, Organic Farming, Cheap Travelling, Throwing Frisbees, Rollerblading