

Dagny Lott

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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 (will 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