

Shiny Shen

shinys@seas.upenn.edu // (919) 812-1376 // www.linkedin.com/in/shinysshen

EDUCATION

University of Pennsylvania, School of Engineering and Applied Sciences, Philadelphia, PA **May 2026**
Candidate for Bachelor of Science of Engineering in Bioengineering Concentration: Medical Devices
Cumulative GPA: 4.0/4.0 Minor: Mathematics, Engineering Entrepreneurship

SKILLS

Prototyping (Solidworks CSWA Certified in Fall 2023, 3D Printing, Laser Cutting, Soldering)

Python, Matlab

Consistent Record-Keeping and Communication

- Engineering Drawings, Microsoft Office, Excel
- Fluent in English and Mandarin, proficient in French

Creative Problem Solving

CERTIFICATIONS/ACHIEVEMENTS

Penn Engineering Entrepreneurship Fellows Program 2025

One of 12 Penn students selected for a 12-month work-study program in technology and entrepreneurship leadership.

Vagelos Undergraduate Research Grant for Spring 2024

Amount: \$350 | *Project:* Optimizing Graphene Growth on Copper Foil for Bubble Transfer and Reusability of the Copper Catalyst

Penn Undergraduate Research Mentoring Program (PURM) for Summer 2023

Amount: \$5000 | One of about 200 students accepted out of over 1100.

RELEVANT COURSEWORK

Mechanical Design; Biomaterials; Biomechanics; Scientific Computing in Python; General Chemistry I & II with Lab; Physics Mechanics & Electricity and Magnetism; Bio-Molecular Principles with Lab; Intro to Health Care Systems

PROJECTS/EXPERIENCES

Research Assistant in the A.T. Charlie Johnson Lab (NIH Funded) | Philadelphia, PA *June 2023 to Present*

- Trained in clean room fabrication processes for graphene biosensors, to be used in portable HIV diagnostic devices
- Reviewed literature independently and collaborated via Github with peers on programs analyzing sensor data
- Synthesized program results in a digestible format for weekly lab meetings

UNCG Hackathon for Recipe for Success | *Participant*, Greensboro, NC *February 13, 2021*

- Led a team of three in 24-hour period to design an app ("SnapHack") addressing the prompt of local food insecurity (allowing EBT users to purchase groceries online with delivery by volunteer drivers)
- Presented the winning design to Code for Greensboro (of Code for America)

ACTIVITIES

Assistive Devices and Prosthetic Technologies (ADAPT) Club | *Outreach Chair* *February 2023 – Present*

- Designed and manufactured switch interfaces for children with cerebral palsy to interact with computer games (partnership with the HMS school)
- Interfaces with patient populations in the development of customized assistive devices

Penn Ballet Company | *Social Chair, former Assistant Performance Director and Costume Chair*, Philadelphia, PA *August 2022 – Present*

- Trained in ballet from 2008 to present
- Spearheaded a team of volunteers to create the company's first full sets of costumes, with locally sourced materials
- Identified need to increase campus presence by updating marketing materials and organizing collaborations with other clubs (Penn Dance, Penn Orchestra, The WALK Fashion Magazine, etc.)

Freelance Tailor *December 2021 - Present*

- Children's Stimulus Theatre Club | Head Costume Designer (Spring 2024 Season)