

Margaret Huggins

2479 Sleepy Hollow Dr., State College, PA
mlh355@cornell.edu · (814)206-6471

EDUCATION

Cornell University, Ithaca, NY

Expected Graduation: May 2027

- Pursuing Bachelor of Science in Mechanical Engineering
- Relevant Coursework: Multivariable Calculus, Differential Equations, Linear Algebra, Introduction to Computing, Statics and Mechanics of Solids, Dynamics, Mechanical Properties of Materials, Fluid Dynamics, System Dynamics, Introduction to Mechanical Design (completed a semester long group project centered around the engineering design process), and Thermodynamics
- Lab Experience: welding, constructing brick structures and testing the strength, tensile and compressive strength tests and analysis of the data

State College Area High School, State College, PA

Graduated June 2023

- Relevant courses: Robotics (coding, iterative testing), Electronics (soldering, breadboarding, circuit analysis and construction) AP Physics C (Mechanics and Electricity and Magnetism), AP Calculus BC, AP Statistics
- Awards: The Fullington Service Award (awarded to two graduating seniors for their community service efforts), Outstanding Achievement: Electronics, Top 10% class of 2023, Ferguson Township of Pennsylvania Police Certificate of Appreciation (awarded for lifesaving attempts)

RESEARCH EXPERIENCE

VRow Research Team, Cornell University

August 2025 - Present

- Applied sports research team developing a virtual reality rowing simulator with the goal of creating a platform that offers year-round access to realistic rowing training
- Use Python and UnrealEngine to sync visual and force curve data taken from a water workout with the data from an RP3 rowing machine and send it in a visually clear way to the user via a MetaQuest 3 headset

COMMUNITY ENGAGEMENT/WORK EXPERIENCE

Cornell Women's Rowing, Ithaca, NY

August 2023 - Present

Varsity Athlete

- Practice and compete year round on a team of about 50 women working to improve individual and team speed, through intense training in a team centered environment

State College Area Rowing, State College, PA

Summer 2025

Crew Coach

- Coached high school and college athletes focusing on running practices in a safe and efficient manner

Science Park Recreation Association, State College, PA

May 2020 - August 2023

Seasonal Assistant Manager/Seasonal Lifeguard

- Managed a team of 55 employees including lifeguards and staff to keep the pool running smoothly
- Measured and adjusted chlorine and pH levels to ensure safe swimming environment
- Kept close attention on the patrons in the pool and made decisions about the lifeguard surveillance needed
- Oversaw spending and profits for the concession stand
- Worked with the board on a monthly basis to report on pool operations and facilitate long term goals
- Practiced emergency scenarios regularly and collaborated with coworkers to guarantee efficiency
- Initiated the Emergency Action Plan when needed in a timely and controlled manner

Science Park Recreation Association, State College, PA

May 2021 - July 2024

Seasonal Swim Coach

- Coached children ages 4-18, designing practices, and giving tips catered to each child's ability level
- Head coach for children ages 6 and under and would work with about 15 of them daily for 30 minutes
- Worked with coaches and volunteers to keep swim meets running smoothly and the children safe

SKILLS

- Technical Skills: Basic Python, R, MatLab, and Java, UnrealEngine, CAD (Fusion360), welding, soldering