PHOEBE CUTTER



CONTACT

Address: Falmouth, MA 02540 Phone: (+1) 774-255-0392 Email: pacutter@wpi.edu WWW: www.phoebeunderwater.com WWW:https://www.linkedin.com/in/ phoebe-cutter/

EDUCATION

Bachelor of Science, Mechanical and Biomedical Engineering,Expected in 05/2026 Worcester Polytechnic Institute- Worcester, MA •3.52 GPA •Society of Women Engineers •Vice President, The Period Agenda •AUV Club Mechanical Team •Bionics Club Mechanical Team

SKILLS

- •CAD
- Rapid Prototyping
- Matlab
- Python

Mechanical Design

- FEA
- Microsoft Office
- Problem solving
- Clear communication
- •Data collection and organization
- Fieldwork experience

SUMMARY

Creative and hardworking Mechanical and Biomedical Engineering student with a strong passion for the ocean. I bring a well-rounded background and a solid foundation in mechanical principles such as fluid mechanics and stress analysis. A natural problem solver with extensive teamwork experience, I thrive in collaborative environments and am eager to contribute innovative solutions to cutting-edge projects in ocean engineering.

WORK HISTORY

Research Assistant, 01/2025 to Current WPI Autonomous Vehicle Mobility Institute - Worcester, MA

•Researched existing literature and techniques in collision-free path

- planning and sensor fusion to inform and enhance algorithm development.
- •Developing and implementing collision-free path planning algorithms for an unmanned ground vehicle in indoor environments using lidar point cloud data.
- •Enhancing skills in robotics programming, sensor fusion, and algorithm optimization to advance autonomous systems research.

AI & Water Quality Researcher, 10/2024 to Current EdUHK - Hong Kong

- •Collected over 150 water samples and conducted laboratory analysis
- on water samples to examine water quality and different algae species •Developed a website to educate the public on algae identification,
- water quality, and sustainability, providing an accessible resource for researchers and local residents
- •Trained and Implemented AI-based detection models to automate algae identification
- •Compiled findings into detailed reports and presented research to faculty and community stakeholders

Research Assistant, 08/2023 to 08/2024 WPI MedMaIn Lab

- •Researched devices and patents assisting with mechanical
 - thrombectomy and develop an understanding of circulatory and endovascular systems
- •Assisted in the development of techniques and tools to secure micro sensors inside guiding catheters, enabling real-time data analysis to prevent vein collapse during procedures
- •Conducted data analysis from sensors to identify potential issues in mechanical thrombectomy
- •Troubleshot technical issues with laboratory equipment as needed