



Tess Meier, PhD

PhD in Robotics Engineering

Tess is happy to continue learning at WPI as a PhD student. "I came to WPI as a freshman in biomedical engineering," she says. "At the end of my junior year, I took an entry level <u>robotics</u> class and had such a good time that I picked up a minor in robotics my senior year. I was accepted into the <u>BS/MS</u> program so I was able to stay an extra year and complete my master's in robotics. Then I worked in industry for two years and decided I wanted to come back to school for my PhD. I started last fall and I couldn't be happier with my decision to come back!"

She credits her faculty mentors with helping her hone a direction for her goals and career. She says, "I've had a few very impactful conversations with my mentors that have changed the course of my career, from encouraging me to take my first robotics course, to having honest conversations about teaching and professorship. Along with their support, the environment that my advisor has created for my research allows me to take initiative and ownership of my work and enjoy the process of learning new things every day."

Tess is very proud of her research and contributions to the field of robotics. "I published a conference paper on my research, which I presented at the Engineering in Medicine and Biology Conference this past summer in Glasgow, Scotland," she says. "I'm proud of my decisiveness and confidence in entering robotics engineering and research. I've been able to connect individuals with physical disabilities with the scientific community and communicate the importance of the



Mentor/Advisor

- Gregory Fischer
- Zoe Reidinger
- Ted Clancy

Achievements

- Research paper presented at Engineering in Medicine and Biology Conference, Glasgow, Scotland
- Nominated for The Robotics Medal sponsored by MassRobotics
- NRT FORW-RD Fellowship
- Recipient of Robotics Engineering Graduate
 Student Travel Award

Interests

Painting and any other kind of art

human in engineering. What I love about robotics is that every day looks a little different; one day I'm in the machine shop fabricating a part for my hand exoskeleton, the next day I'm conducting a human subjects study in the MRI machine!"

Her favorite thing about WPI is the environment and the people who surround her. "I always felt like a teammate to my classmates, not like I was competing with them! My IQP experience in Cape Town, South Africa, was also a highlight of my time at WPI so far!" Tess says. For those considering studying at WPI, she says, "there are so many opportunities—you get out of it what you put in! Explore different engineering fields that interest you, even if you have no previous experience!"

Project-based learning, for Tess, has helped her "learn how to learn," she says. "I learned some of my most valuable technical skills from doing projects. When you need to design a seat cushion to prevent bed sores, a universal tool sleeve for people with hand tremors, or a circuit board, you really get practice using the equipment and technology around you." During her two years working in the wearable device industry, she also saw the benefit of WPI's project-based approach. "I would hear from my supervisors that they love hiring WPI graduates because of their ability to solve problems from the experiences they had doing hands-on projects," she says.

Upon earning her PhD, Tess plans to stay in academia for her career. "I'm hoping to one day become a research professor. I would love the opportunity to continue my research and work with students. Just one conversation or class could expose a student to a new topic they had never heard about, or encouraging them to consider a career path they thought was out of reach," she says. "One day I want to have my own lab that focuses on rehabilitative and assistive robotics, working closely with patient and clinician collaborators."

- Reading
- Music bingo
- · Hanging out with friends and her cat, Billy

Campus Activities

- Technical Event Officer, IEEE Robotics and Automation Society (RAS) Chapter
- Lab outreach and tours to visitors, especially middle school and high school students



I always felt like a teammate to my classmates, not like I was competing with them!



Wearable Robot Offers Hope

Tess uses an insider's perspective to perfect an exoskeleton hand prototype.

> READ MORE IN THE WPI JOURNAL

Discover more about WPI students

Check out other Student Voices here.

