

Ph.D. Position in Robotics

The Interactive Robotics Laboratory (IRL) is looking to fill one Graduate Research Assistant (GRA) position at the Ph.D. level, starting Fall 2025. Interested candidates may apply to West Virginia University (WVU) Dept. of Mechanical, Materials and Aerospace Engineering for ME or AE degrees or to the Lane Dept. of Computer Science and Electrical Engineering for CS, EE, or CpE degrees.

Current research at IRL includes robot design, decision making/autonomy, and swarm/multicellular robots, with applications to space exploration, robotic precision pollination, among others. Please see our research demonstrations at <u>https://www.youtube.com/c/WVUIRL</u>.

IRL provides a free-thinking environment and state-of-the-art facility that allows students to reach their full potential. At IRL, students are encouraged to develop their own creative ideas, supported by resources provided internally and from external sponsors. IRL students have won over 60 fellowships and awards so far. As a group, IRL won the NASA Sample Return Robot Centennial Challenge with a total prize of \$855,000. The robots designed at IRL have been to places such as the JPL Mars yard, Utah desert, underground mines, berry farms, and the U.S. Capitol, and were featured in over 170 stories by media outlets such as BBC, CNN, Scientific American, Wired, and the Discovery Channel.

IRL is a part of WVU Robotics, a rapidly growing community of roboticists with interests ranging from bio-inspired robotics to multi-robot systems: <u>https://robotics.wvu.edu/</u>.

Responsibilities: formulating research questions and conducting exploratory research; algorithm development; robot systems design, programming, integration, and field testing; publishing scholarly articles; mentoring undergraduate and junior graduate students.

Qualifications: prospective students should hold a master's or bachelor's degree in engineering, computer science, or related disciplines. The candidates should be motivated and capable of creatively working in a team environment and should have excellent verbal and writing skills in English.

Contact Email: yu.gu@mail.wvu.edu