

PhD Student Position Announcement

The SMART Lab (https://www.smart-laboratory.org) at Indiana University Bloomington is inviting applications for 1–2 fully funded PhD student positions in the broad areas of multi-robot systems (MRS), human-robot interaction (HRI), and robot learning, beginning in Fall 2026 (Spring 2026 start is also possible). The students will join SMART Lab, recently relocated from Purdue University, directed by Dr. Byung-Cheol Min, Professor of Computer Science and Intelligent Systems Engineering. These positions offer opportunities to explore new research topics and define independent research directions while collaborating closely with the lab's faculty, postdoctoral researchers, and fellow graduate students. We are particularly seeking highly self-motivated individuals who are unafraid of failure, eager to take on challenging research problems, and committed to pushing the boundaries of robotics to solve real-world challenges.

SMART Lab's research spans both fundamental and applied domains, addressing complex problems in planning, control, algorithm development, and learning within diverse scientific and engineering contexts in robotics. In MRS, we focus on designing and controlling teams of robots operating in dynamic and uncertain environments through distributed control and coordination frameworks. This work emphasizes scalability, robustness, and efficiency, ensuring that robot teams can collaboratively perform tasks under real-world constraints. In HRI, we explore methods to enable flexible, adaptive, and effective interactions between humans and robots, accounting for diverse scenarios, contextual variations, and individual human characteristics. In robot learning, we develop advanced algorithms, adaptive control strategies, and learning-based frameworks that empower robots to acquire and refine skills autonomously and through intuitive human interaction.

Qualifications

- Education MS degree in Robotics, Computer Science, Electrical and Computer Engineering, Mechanical Engineering, or a closely related field is preferred. Applicants with a BS degree will be considered only if they have substantial prior research experience and at least a couple of coauthored publications in recognized robotics venues.
- Experience Prior research experience in robotics, AI, or related fields is highly desirable. A strong background in programming (C++/Python/ROS) and hands-on robotics experience will be considered a plus.
- Skills Strong motivation for research; ability to work independently as well as collaboratively in teams; intellectual curiosity and analytical thinking; willingness to tackle challenging problems; and effective oral and written communication skills. Rapid prototyping skills are considered a plus but are not required.

Dates

- Review of applications will begin immediately and continue until the positions are filled.
- The preferred start date is Fall 2026, but Spring 2026 is also possible. Current IU students may begin immediately.

To Apply – Email your up-to-date CV to Dr. Byung-Cheol Min at minb@iu.edu for initial screening. After reviewing your CV, we will reach out to schedule a Zoom interview with selected candidates.