

Candidate Information Template

CANDIDATE NAME

Meghan E. Huber, Ph.D.

CANDIDATE EMAIL ADDRESS

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CANDIDATE AFFILIATION AND ADDRESS

Assistant Professor, Mechanical and Industrial Engineering
Adjunct Professor, Manning College of Information and Computer Science
Adjunct Professor, Biomedical Engineering
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University of Massachusetts Amherst

160 Governors Drive, Room 219
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IEEE MEMBER NUMBER

94235150

COUNTRY OF RESIDENCE

USA

HOW WOULD YOU CATEGORIZE YOUR CURRENT ORGANIZATION?

- ☐ Government
- ☒ Academia
- ☐ Industry
- ☐ Retired
- ☐ Other

POSITION SOUGHT

RAS AdCOM Member

BIOGRAPHY

Meghan E. Huber is an Assistant Professor in the Department of Mechanical and Industrial Engineering at the University of Massachusetts Amherst (promotion to Associate effective Fall 2026). She also holds adjunct appointments in Kinesiology, Biomedical Engineering, and the Manning College of Information and Computer Sciences. She directs the Human Robot Systems Laboratory, where her research focuses on physical human-robot interaction, as well as the UMass Integrative Locomotion Laboratory, which develops technologies to enhance human running performance. Her wearable robotics research has been recognized through prestigious awards, including an NIH Trailblazer Award and an NSF CAREER Award, while her teaching was recognized with the UMass Amherst College of Engineering Outstanding Teaching Award. Dr. Huber received her Ph.D. in Bioengineering from Northeastern University and did her postdoctoral training in Mechanical Engineering at MIT. She has also held visiting research appointments at the Max Planck Institute for Intelligent Systems and INRIA Nancy.

IEEE ACTIVITIES

- Publication Co-Chair of **2024 IEEE-RAS International Conference on Humanoid Robots**

- Workshop Co-Organizer at **seven IEEE-RAS conferences**
 - 2026 BioRob, 2024 Humanoids, 2022 ICRA, 2021 ICRA, 2020 IROS, 2020 ICRA, 2019 ICRA
- Associate Editor for **six IEEE-RAS conferences**
 - 2026 ICRA, 2024 ICRA, 2023 ICRA, 2022 ICRA, 2021 ICRA, 2020 BioRob
- Reviewer for **sixteen IEEE-RAS conferences**
 - 2026 ICRA, 2025 ICRA, 2023 Humanoids, 2023 ICRA, 2023 IROS, 2022 Humanoids, 2022 IROS, 2022 ICRA, 2021 IROS, 2021 ICRA, 2020 BioRob, 2020 ICRA, 2019 ICRA, 2018 IROS, 2018 BioRob, 2017 IROS
- Guest Editor **IEEE Robotics and Automation – Letters** for Special Issue, “Variable impedance control and learning in complex interaction scenarios: Challenges and opportunities” in 2022
- Associate Editor of **IEEE Transactions on Neural Systems and Rehabilitation Engineering** since 2013

QUALIFICATIONS

I am well qualified to serve as an IEEE-RAS AdCom member based on my strong track record of service to IEEE-RAS, research leadership, and community building. Moreover, my robotics research has been supported by highly competitive funding programs in the US and international industry partnerships, which reflect both the scientific merit and translational impact of my research.

I would bring two perspectives to AdCom that I believe are particularly valuable for IEEE-RAS. First, my career has been built around connecting researchers across disciplines to create opportunities that would not emerge within a single field. My work spans robotics, biomechanics, neuroscience, rehabilitation, and sports technology, and I have extensive experience building collaborations among communities with different expertise, perspectives, and goals. I believe many of the most important advances in robotics will emerge from these interdisciplinary partnerships, and I would welcome the opportunity to help IEEE-RAS continue serving as a catalyst for such collaborations.

Second, I bring the perspective of someone whose path into robotics was not entirely straightforward. While I always had an interest in robotics as a student, I did not initially view myself as a robotics researcher. In fact, it was not until my postdoctoral training that I developed the confidence to pursue robotics research as a central part of my career. I thought it was too late for me to become a roboticist as I felt so behind compared to my peers. However, the warm and welcoming experience I had attending my first IEEE-RAS conference changed my perspective. This nontraditional path has given me a deep appreciation for the many talented students and researchers who are interested in robotics, but may not yet see a clear path into the field. As an AdCom member, I would bring advocacy for programs and opportunities that broaden participation, lower barriers to entry, and support emerging researchers from diverse backgrounds.

MAJOR ACCOMPLISHMENTS

- **Expanded engagement between IEEE-RAS and neighboring scientific communities:** Through co-organization of workshops at ICRA, IROS, Humanoids, and BioRob, I brought together researchers from robotics, biomechanics, neuroscience, rehabilitation, and healthcare to develop new collaborations and explore emerging research directions.
- **Provided editorial leadership across IEEE-RAS conferences and journals:** Through extensive editorial service for IEEE-RAS and IEEE more broadly, I have helped uphold the standards of rigor and excellence in the robotics research that underpin our publications and conferences.
- **Created pathways for students to enter the robotics community:** As one of the founding faculty members of the UMass Amherst Robotics program, I have helped build a thriving robotics ecosystem through the development of robotics coursework, the establishment and mentorship of student robotics organizations, and the training of undergraduate and graduate students from diverse disciplinary backgrounds.

- **Strengthened the regional robotics community through leadership and community building:**
Through my involvement with helping to organize the regional robotics conferences, such as 2024 Northeast Robotics Colloquium (NERC) and 2026 New England Manipulation Symposium (NEMS), I have helped create opportunities for collaboration among universities, researchers, students, and industry partners, advancing robotics research, education, and workforce development across the US New England/Northeast Region.

POSITION STATEMENT

What an exciting time to be a robotics researcher! We are seeing a rapid advancement in robotics in real-time, and the technology we develop today will fundamentally shape how people work, learn, and interact with the world around them. As an international research society, we have a responsibility not only to advance the frontiers of robotics, but also to help shape the future in which these technologies are developed and deployed in ways that are innovative, responsible, inclusive, and equitably aligned with human needs across the globe. If elected to AdCom, it is my goal to support initiatives in line with this vision.

I will work to strengthen IEEE-RAS as a vibrant and inclusive community that brings together researchers, students, and industry from across the robotics ecosystem and beyond. As robotic capabilities continue to grow, the impact of robotics research will continue to grow well beyond the traditional boundaries of our field. As such, I will support initiatives that foster new opportunities in robotics for collaboration across diverse research disciplines and application domain, as well as for students and trainees from a broad range of backgrounds to enter and thrive within the robotics community.

I am also committed to strengthening connections between academia and industry. As robotics technologies continue to move from research laboratories into real-world applications, I will support efforts to promote partnerships that accelerate innovation, facilitate technology transfer, and ensure that research is informed by real-world challenges and opportunities.

As a human-centered roboticist myself, I strongly believe that IEEE-RAS should continue to provide leadership on the responsible and ethical development of robotics technologies. As robots become increasingly integrated into society, we must consider not only what robots can do, but also how they affect people, communities, and the broader world in which they operate. I will view every decision through this lens and support efforts that reinforce this responsibility.

I am also very committed to ensuring that IEEE-RAS remains a trusted venue for the dissemination of high-impact robotics research. As the volume of research output continues to grow and the robotics landscape evolves rapidly, I will support efforts that uphold rigorous peer review, scientific integrity, and technical excellence, while also ensuring that our conferences and publications continue to evolve to meet the needs of a changing research community.

COMMITMENT TO SERVICE

I, Meghan E. Huber, hereby certify that if elected, I will serve in the position to which I am elected for the term of the office.