Professor (all ranks) in Robotics and Autonomous Systems
Arizona State University at the Polytechnic Campus

Job Title	Professor (all ranks) in Robotics and Autonomous Systems
Department	The School of Manufacturing Systems and Networks https://msn.engineering.asu.edu/
Institution	Arizona State University at the Polytechnic Campus Mesa, Arizona
Date Posted	Nov. 7, 2024
Application Deadline	Open until filled
Position Start Date	August 2025
Job Categories	Assistant Professor Associate Professor Professor
Academic Field(s)	Robotics Manufacturing & Quality Engineering
Apply Online Here	https://hiring.engineering.asu.edu/
Apply By Email	

Job Description

The Ira A. Fulton Schools of Engineering at Arizona State University (ASU) and the School of Manufacturing Systems and Networks seek applicants for a tenure-track or tenured faculty position in the area of Robotics and Autonomous Systems. The School of Manufacturing Systems and Networks (https://msn.engineering.asu.edu/), one of the eight Fulton Schools, houses vibrant engineering research programs at the undergraduate, masters, and PhD level related to Robotics and Autonomous Systems, as well as Manufacturing (learn more at https://research.engineering.asu.edu/). We seek applicants who can enhance our abilities in these areas as part of a community of experts. Particular

areas of interest include, *but are not limited to:*

- Digital Twins for Physical Systems related to robotics and autonomous systems
- Computational design and materials-aware embodiment of robotic systems, e.g. soft robotics, computational intelligence, material processing intelligence
- Virtual, augmented, and mixed reality for hybrid human-robot integration in the "industrial metaverse"
- Large Language Models, Natural Language Processing, and their applications to human-robot interactions.
- Theory and applications of machine learning and AI, as it relates to robotic perception, planning, and control.
- Autonomous and secure systems, especially as it relates to manufacturing in extreme environments

We search for applicants who will contribute to our academic programs, promote transdisciplinary teaching and research, and help the university to achieve its aspirations, including enabling student success, transforming society, valuing entrepreneurship, and conducting use-inspired research. Faculty members in the Fulton Schools are expected to develop an internationally recognized and externally funded research program, adopt effective pedagogical practices in the development and delivery of graduate and undergraduate courses, advise both undergraduate and graduate student research and projects, and undertake service activities.

The School of Manufacturing Systems and Networks is dedicated to advancing innovation in manufacturing science and engineering. It boasts a dynamic group of faculty members, including nine recipients of the NSF CAREER award, who collaborate across various research areas like manufacturing process science, automation & robotics, smart manufacturing, data analytics, and AI. Faculty are encouraged to create broader impacts through their research, not only by generating knowledge but also through technology transfer and entrepreneurial ventures. The School's location in the Phoenix metro offers close ties to the aerospace & defense industry, semiconductor/microelectronics and national laboratories, facilitating collaborative research. The School also contributes significantly to the Southwest Advanced Prototyping Hub (SWAP) and the Manufacturing Institute - Electrified Processes for Industries Without Carbon (EPIXC). Notably, the School has a unique asset in that it offers Bachelor's, Master's, and Ph.D. degrees in robotics and autonomous systems, as well as similar degrees in manufacturing engineering. The School is currently building a state-of-the-art, approximately 200,000-square-foot facility, further enhancing its leadership in manufacturing innovation. **We are seeking faculty who can contribute to the School's mission and specifically invite candidates to address how they can do soin their cover letter.**

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Appointment will be at the Assistant or Associate rank commensurate with the candidate's experience and accomplishments, beginning August 2025.

Qualifications

Required qualifications:

- Earned doctorate in engineering, computer science, or related disciplines by the time of appointment
- Evidence of excellence in research, as appropriate to the candidate's rank
- Evidence of excellence in teaching, as appropriate to the candidate's rank

Desired qualifications:

- Demonstrated commitment to a collaborative, transdisciplinary approach to research and teaching
- Demonstrated success in conducting research, including an established track record publishing in academic journals, presenting at conferences, invited talks, etc.
- Demonstrated success, appropriate to the candidate's rank, in mentoring, training, supervising, and graduating students for both academic and industrial careers
- Demonstrated success, appropriate to the candidate's rank, in navigating the funding landscape, with prior success attracting and maintaining an independent research program
- Demonstrated success, appropriate to the candidate's rank, in collaborating with industry and/or developing an entrepreneurial ecosystem.
- Commitment to inclusive research and teaching practices

Application Instructions

Application review will begin December 1, 2024. Applications will continue to be accepted on a rolling basis for a reserve pool. Applications in the reserve pool may then be reviewed in the order in which they were received until the position is filled. To apply, visit https://hiring. engineering.asu.edu/ and select "apply now" next to the corresponding position. Candidates will be asked to create or use an existing Interfolio Dossier to submit the following:

- Cover Letter
- Curriculum Vitae
    - Statement descriving research interests (three pages maximum)

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- ○ Statement describing teaching interests and philosophy (two pages maximum)
- ○ Applicants are encouraged to include a statement describing experience, activities, contributins or plans related to supporting the ASU Charter and it's nine design aspirations (two pages maximum)
- Contact information for three references

The ASU Charter states, "*ASU is a comprehensive public research university, measured not by whom it excludes, but by whom it includes and how they succeed; advancing research and discovery of public value; and assuming fundamental responsibility for the economic, social, cultural and overall health of the communities it serves.*" The Fulton Schools of Engineering are dedicated to cultivating excellence, delivering innovation that matters, encouraging bold thinking, fostering a community of learning and collaboration, and building a foundation for all to be successful. Applicants are encouraged to address how their past, current, and future activities align with the ASU Charter and Fulton Schools of Engineering values in their application materials.

For additional information regarding position specifics, please contact the search committee chair, Professor Daniel Aukes via email at danaukes@asu.edu.

EEO/AA Policy

Equal Employment Opportunity Statement

A background check is required for employment. Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other basis protected by law.

See https://www.asu.edu/aad/manuals/acd/acd401.html and https://www.asu.edu/titleIX/.

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU's Annual Security and Fire Safety Report is available online at https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf. You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.

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Contact Information

Contact

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