

Arizona State University
Ira A. Fulton Schools of Engineering
School for Engineering of Matter, Transport and Energy
Machine Learning in Mechanical and Materials Engineering
Location: Arizona State University – Tempe Campus

The [Ira A. Fulton Schools of Engineering](#) at [Arizona State University](#) (ASU) and the School for Engineering of Matter, Transport and Energy seek applicants for appointments made at the tenure-track or tenured faculty position in the area of machine learning in mechanical and materials engineering. The School for Engineering of Matter, Transport and Energy, one of the seven Fulton Schools, houses a vibrant community of researchers in the mechanical and aerospace engineering, chemical engineering, and materials science disciplines (learn more at <https://research.engineering.asu.edu/>). We seek applicants who complement our abilities in these areas and will discover new Machine Learning/Artificial Intelligence-based approaches for advancing the fields of mechanics and materials engineering. Areas of interest include but are not limited to, aerospace materials and structures, materials characterization and/or processing/manufacturing, mechanics of defects, materials reliability and failure, and computational materials science.

We seek 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.

This search is part of ASU's engagement with the [Arizona's New Economy Initiative \(NEI\)](#), a bold effort to ensure that Arizona leads the new economy that will rely on engineering, computing and technology to drive sustainable growth, resilience and opportunities for all. NEI investments in the Fulton Schools of Engineering will grow our world class faculty to accelerate research outcomes and to broaden student access to our programs; will establish Science and Technology Centers to foster the growth of new economy Industries; and will expand experiential learning and workforce training opportunities.

Appointment will be at the **Assistant, Associate or Full Professor** rank commensurate with the candidate's experience and accomplishments, beginning August 2023. Although the tenure home may be in any of the Ira A. Fulton Schools of Engineering, the School for Engineering of Matter, Transport and Energy is currently the most involved in the interest of this research.

Qualifications

Required qualifications:

- Earned doctorate degree in aerospace engineering, chemical engineering, materials science, mechanical engineering, or related discipline at the time of appointment, and
- Evidence of excellence in research, as appropriate to the candidate's rank; and
- Evidence of excellence in teaching, as appropriate to the candidate's rank

Desired qualifications:

- Evidence of expertise and/or sophisticated research plans for applying machine learning and artificial intelligence to solve mechanical/materials engineering problems, and
- Demonstrated commitment to a collaborative, transdisciplinary approach to research and teaching

- A record of acquiring external funding, as appropriate to the candidate's rank, and
- A record of impactful publications in top-tier journals/conferences, as appropriate to the candidate's rank, and
- Commitment to mentoring students and delivering courses in multiple technology-enhanced formats, as appropriate to the candidate's rank, and
- Commitment to curriculum development and innovative pedagogy; and a demonstrated appreciation for entrepreneurial activities, as appropriate to the candidate's rank.
- Demonstrated impact to diversity and inclusion for broadening participation in science and engineering.

Application Instructions

Application deadline is **November 27, 2022**. 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 describing research interests (two pages maximum)
- Statement describing teaching interests and philosophy (two pages maximum)
- Statement describing commitment and approaches to advance Diversity, Equity, Inclusion and Belonging* (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 continuous innovation, student success, faculty excellence, and cultivation of an environment that is diverse, equitable, inclusive and promotes belonging. The diversity statement provides applicants an opportunity to demonstrate their past and current activities in promoting diversity, equity, inclusion and belonging and how future activities will align with upholding the ASU Charter.

For additional information regarding position specifics, please contact the search committee co-chairs, Drs. Kumar Ankit and Jay Oswald via email at kumar.ankit@asu.edu and joswald1@asu.edu, respectively.

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 be considered without regard to race, color, sex, religion, 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.