



**Department of
Mechanical Engineering**
UNIVERSITY OF WISCONSIN-MADISON

PVL #239792

Assistant Professor: University of Wisconsin- Department of Mechanical Engineering

Position Summary:

The Department of Mechanical Engineering at the University of Wisconsin-Madison seeks to fill four new faculty positions in two focus areas (1) machine learning, AI, and data-driven approaches to modeling, simulation, and design; and (2) robotics, controls, and automation.

The first focus area is tied to the topics of data-driven approaches, artificial intelligence, and machine-learning as manifested in design, modeling, and simulation within Mechanical Engineering. The department is particularly interested in candidates whose research in this focus area can address fundamental challenges in topics including but not limited to: topological design; human-centric product design; simulation of large-scale, complex dynamical systems; design of cyber-physical systems; control of dynamic systems; multi-physics modeling and simulation; reduced order modeling; and high dimensional optimization.

The second focus area of interest is tied to the broad topics of robotics, controls, and autonomous systems. The department is particularly interested in candidates whose research is focused on the design, modeling, dynamics, and control of robotic systems. Research in these areas would lead to breakthroughs in challenging applications such as: autonomous robots and vehicles operating in complex and unstructured environments; manipulation in complex tasks; mobility in water, air, land, or space environments; and human-robot cooperation. The department is particularly interested in candidates who, by drawing on a strong analytical foundation, would leverage the experimental assets in the College of Engineering's new Robotics and Autonomous Systems facility to solve societally impactful engineering problems.

The UW-Madison College of Engineering strives to foster a respectful, diverse, equitable, and inclusive environment. Candidates with specific goals and plans that advance this mission are strongly encouraged to apply.

Requirements:

PhD in Mechanical Engineering or a closely related field, with demonstrated excellence in research and teaching.

Principal duties:

Teaching and developing undergraduate and graduate courses; mentoring graduate students and supervising their research; developing and directing a strong, extramurally funded research program; participating in departmental and university faculty governance; and contributing to professional and public service.

Please see full position description, requirements, and application instructions in the official position vacancy listing: <https://jobs.hr.wisc.edu/en-us/job/510307/assistant-professor> .

Department of Mechanical Engineering

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