

Assistant Professor
Department of Mechanical and Aerospace Engineering
Herbert Wertheim College of Engineering
University of Florida

The Herbert Wertheim College of Engineering (HWCoe) at the University of Florida (UF) invites applications for a full-time, nine-month tenure track faculty position at the rank of Assistant Professor in the Department of Mechanical and Aerospace Engineering (MAE). Candidates are sought whose research focus includes reinforcement learning in general, and especially those who are interested in collaborative research with the Center for Coastal Solutions (CCS), housed within the HWCoe. MAE is focused on pioneering artificial learning approaches that enable fine scale analysis of dynamic matter to provide breakthrough understanding in the flow of fluids, failure of materials, energy transport, control of autonomous dynamic systems, and the building blocks of biology, disease, and life. The CCS (<https://ccs.eng.ufl.edu/>) is advancing monitoring platforms and Earth Systems models that track and predict the risks and impacts of coastal hazards, including but not limited to flooding, sea level rise, harmful algae blooms, invasive species, and pathogen outbreaks. Fundamental research and development in reinforcement learning would complement growth areas within MAE and the mission of the CCS. Applicants working in this space would find a wealth of collaborative opportunities in this position. The successful candidate is expected to have a doctoral degree in mechanical and aerospace engineering or computer science or a related field at the time of hiring. In addition, the candidate should have a record of successful proposal writing, mentoring, and classroom teaching of undergraduate and graduate students.

The University of Florida is the flagship campus of the State of Florida university system and is ranked as the #6 best public US university according to US News and World Report. UF recently announced a \$70 million artificial intelligence partnership with NVIDIA to create an AI-centric data center that houses the world's fastest AI supercomputer in higher education. The Mechanical & Aerospace Engineering Department (MAE) is one of the largest degree-granting units at the University of Florida. The Department has over 60 faculty members, 500 graduate students, 1900 undergraduate students, and \$12.5 million in annual research expenditures (ASEE). BS, MS, and PhD degrees are offered in both Mechanical Engineering and Aerospace Engineering. MAE is home to more than a dozen student societies and provides exceptional dedicated facilities and financial support for our student-led design/build/compete organizations that routinely capture top placement at national and international competitions. Traditional strengths in solid mechanics and design, thermal fluid systems, and dynamics and controls are leveraged in many interdisciplinary and cutting-edge efforts that include autonomous systems, multiphase turbulent systems, experimental mechanics, advanced manufacturing, novel energy systems, computational methods, soft-matter engineering, and aerospace technologies and systems.

The University of Florida Center for Coastal Solutions seeks to leverage innovative technologies, applied Artificial Intelligence, workforce training programs, and multi-sector collaboration to enable local communities, the state, and the nation to better track, forecast, mitigate and prevent coastal hazards, improving the quality of life and economic health of coastal residents (see more at: <http://ccs.eng.ufl.edu>). In pursuit of this mission, the CCS, established in October 2020 and led by HWCoe faculty, is integrating expertise, resources, and workforce training capabilities drawn from across the University of Florida, ranging from the Warrington School of Business to Levin College of Law, College of Design, Construction and Planning, UF|IFAS, and the College of Medicine. The Center is applying an open-source model to developing solutions to the most pressing environmental, economic and public health hazards facing coastal communities, forming extensive and rich partnerships with the public and private sector to drive innovation.

The search committee will begin reviewing applications immediately, with the first full committee screening occurring on January 25th, 2021, and will continue to receive applications until the position is filled. All applications must be submitted through Interfolio at: <https://facultyjobs.hr.ufl.edu/>. (Please see Job Requisition #TBD). Complete applications must include the following files in PDF format: (1) cover letter (summary, introduction related to hiring emphasis areas, and any synergies with UF ECE, CISE, or ESSIE departments, and the Center for Coastal Solutions); (2) a curriculum vitae; (3) a statement describing the applicant's experience in enhancing diversity, equity and inclusion through research, teaching, or service, and vision for promoting a more inclusive experience at the University of Florida; (4) a research program vision statement detailing short- and long-term goals; (5) a teaching statement describing the applicant's teaching experience and vision for developing a teaching program at the University of Florida; (6) up to three refereed journal or conference articles (co-)authored by the applicant; and (7) the names, addresses, phone numbers, and email addresses of no less than three and up to five references. To be competitive, candidates for this faculty position should submit a cover letter, research statement, and education vision statement that complement the overall mission of the Center for Coastal Solutions. The cover letter should be addressed to: Dr. Christine Angelini, Search Committee Chair, Director of the Center for Coastal Solutions.

The final candidate will be required to provide an official transcript to the hiring department upon hire. Selected candidate will be required to provide an official transcript to the hiring department upon hire. A transcript will not be considered "official" if a designation

of “Issued to Student” is visible. Degrees earned from an educational institution outside of the United States are required to be evaluated by a professional credentialing service provider approved by National Association of Credential Evaluation Services (NACES).

The anticipated start for the position is Fall 2021 with some flexibility for a later start based on individual needs.

If an accommodation due to a disability is needed to apply for this position, please call 352-392-2477 or the Florida Relay System at 800-955-8771 (TDD). Hiring is contingent upon eligibility to work in the US. Background searches are conducted in accordance with Florida's Sunshine Law.

The University of Florida is committed to nondiscrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information, and veteran status in all aspects of employment including recruitment, hiring, promotions, transfers, discipline, terminations, wage and salary administration, benefits, and training.