

Assistant Tenure Track Faculty Position
Department of Mechanical and Aerospace Engineering
Department of Electrical and Computer Engineering

The Departments of Mechanical and Aerospace Engineering (<https://mae.osu.edu/>) and Electrical and Computer Engineering (<https://ece.osu.edu/>) at The Ohio State University invite applications for a split tenure track assistant professor faculty appointment in the area of dynamics, estimation and control of autonomous aerospace systems.

University Overview: The Ohio State University prides itself on being model 21st-century public, land grant, research, urban, community engaged institution. Ohio State is a top-20 public university, enrolling over 60,000 students, and its Ohio State Wexner Medical Center is one of America's leading academic health centers and recently ranked No. 4 on Forbes' list of best U.S. employers for diversity. The Ohio State University is in Columbus, Ohio. As the nation's 14th largest city, Columbus invites and embraces cultural and economic diversity. Read more at ([Experience Columbus](#)).

College Overview: The College of Engineering offers 14 undergraduate and 13 graduate programs in 12 departments or centers, as well as, three undergraduate and four graduate degrees in the Knowlton School of Architecture, to approximately 10,000 students. The college has recently expanded its degree offerings with a BS in Engineering Technology available on the regional campuses of the university. The college is one of the largest in the field with 405 faculty. The college has 14 National Academy of Engineering members and numerous members of societies and award recipients. In fiscal year 2020, the college had nearly \$138.5 million in externally sponsored research expenditures. Industry R&D expenditures for the College of Engineering in fiscal year 2020 totaled nearly \$44 million.

Columbus Overview

As the nation's 14th largest city, Columbus invites and embraces cultural and economic diversity. We are home to Fortune 500 companies, world-class research institutes, top-ranked hospitals, and the state's capitol. The city was named the 2015 "Intelligent Community of the Year" by the Intelligent Community Forum, called a "Midwestern style capital" by the New York Times and one of the top ten "Best Places to Live" by Money Magazine. Columbus is home to multiple dynamic arts districts. Read more at ([Experience Columbus](#)).

Department Overviews:

The Department of Mechanical and Aerospace Engineering is one of the largest departments in the College of Engineering at The Ohio State University. We are the home to nearly 80 faculty and over 35 dedicated staff members. Approximately 1900 undergraduates are pursuing a degree in either Mechanical or Aerospace Engineering through rigorous programs that feature hands-on, project-based learning. Nearly 300 graduate students are seeking a degree in either Mechanical, Aerospace, or Nuclear Engineering. Our innovative and creative faculty adhere to the philosophy that true innovation depends upon the cooperation of academia, industry, and government working together to advance the goals of science and technology. Our students and faculty regularly collaborate with colleagues in other departments in the College of Engineering and with multiple other colleges across campus. Strong research relationships exist with the Air Force Research Laboratory, NASA Glenn Research Center, GE Aviation, Honda of America, and numerous other industrial partners. Department faculty have over \$26 million in sponsored research expenditures in areas such as advanced transportation systems (automotive and aerospace), energy and environmental quality, materials and manufacturing, micro- and nanotechnology, nuclear energy, and bioengineering while providing leadership for the Center for Automotive Research, The NSF IUCRC Smart Vehicle Concepts Center, the Aerospace Research Center, the Simulation Innovation and Modeling Center, and the Nuclear Reactor Laboratory.

Consistently ranked among the best in the nation, the Department of Electrical and Computer Engineering (ECE) at The Ohio State University provides superior training for students and groundbreaking research at the frontier of high technology in all areas of electrical and computer engineering. ECE faculty, researchers and students engineer solutions to problems in diverse fields, from bio- to nano-technology, from energy to mobility, from health sciences to communication, and beyond. The Ohio State University has the top ranked ECE department among Ohio universities, according to U.S. News and World Report. The faculty body of the department consists in 50 tenure-track faculty, 6

research-track faculty and 5 clinical faculty, and sports thirty IEEE Fellows and one National Academy of Engineering member. The department's faculty and researchers are active in the areas of analog and RF electronic circuits, communication and signal processing, computer and digital systems, computer vision and image processing, control systems, electromagnetics, remote sensing, microwaves, optics and photonics, nanotechnology and electronic materials, robotics, intelligent transportation, networking, sustainable energy, and power systems. In fiscal year 2020, this research was supported by \$20.9 million in externally sponsored funding. Along with other state-of-the-art facilities on campus, the ECE department is home to thirty-plus research centers and laboratories, including: ElectroScience Laboratory Artificial Intelligence Institute for Future Edge Networks and Distributed Intelligence, High Voltage and Power Electronics Laboratory, Center for High Performance Power Electronics, Center for Enabling Cyber Defense in Analog and Mixed Signal Domain, Circuits Laboratory for Advanced Sensors and Systems, Crash Imminent Safety University Transportation Center, Information Processing Systems Laboratory, Solid State Electronics and Photonics Laboratory, and the Micro-Electronics Security Training Center.

TIU/ Position Overview

The Departments of Mechanical and Aerospace Engineering and Electrical and Computer Engineering invite applications for a regular tenure-track faculty appointment in the area of dynamics, estimation and control of autonomous aerospace systems. This will be a split appointment, with a 75% appointment in Mechanical and Aerospace Engineering and 25% in Electrical and Computer Engineering. The Department of Mechanical and Aerospace Engineering will be the home department and the tenure initiating unit. The appointment is anticipated at the rank of Assistant Professor. The successful applicant will reinforce the research portfolio at The Aerospace Research Center (ARC: <https://arc.osu.edu>). Established in 2013, ARC earns its international prominence through state, federal and industry funding (\$8M in 2020) that supports research in unmanned aerial systems, aerodynamic flow control and gas turbines. The successful applicant will be expected to complement and expand MAE and ECE departmental strengths in dynamics, estimation and control of autonomous aerospace systems, to develop and sustain active sponsored research programs, to develop and deliver compelling core undergraduate and/or graduate courses, to support and elevate ARC, and to be an active participant in the international dynamics and control communities. Research leadership is expected, including the ability to attract significant federal funding and industrial partnerships to sustain a vibrant research program. Candidates with interests in all areas of guidance, navigation, control, autonomy, human-autonomy teaming, intelligent systems, distributed and cooperative systems, cyber-physical systems, validation and verification, XGEO and Cislunar situational awareness are encouraged to apply. Specialization in aeronautical and space systems will be given equal consideration.

Required Qualifications

Applicants are required to hold a doctoral degree with a major in Aerospace Engineering, Mechanical Engineering, Electrical Engineering or a closely related field

Desired Qualifications

- Strong commitment to cultivating an equitable, diverse, and inclusive environment in all areas of scholarship, instruction, and outreach
- Potential for, or the evidence of, the ability to secure federal and/or industrial support for innovative research
- A commitment to interdisciplinary education and collaborative research
- Commitment to engaging in entrepreneurial partnerships

How to Apply

Interested applicants should submit an application in Academic Jobs Online:

<https://academicjobsonline.org/ajo/jobs/19746>. Please include a cover letter, curriculum vita, diversity statement (*describe experiences, current interests or activities, and/or future goals that promote a climate that values diversity and inclusion in one or more of the areas of scholarship, instruction and outreach*), statements of teaching and research interests, and names and contact information of three references commensurate with the rank sought.

The Ohio State University is committed to establishing a culturally and intellectually diverse environment, encouraging all members of our learning community to reach their full potential. We are responsive to dual-career families and strongly promote work-life balance to support our community members through a suite of institutionalized policies. We are an NSF Advance Institution, a member of the Ohio/Western Pennsylvania/West Virginia Higher Education Recruitment Consortium (HERC) and have an excellent partner in The Ohio State University Wexner Medical Center.

The Ohio State University is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to age, ancestry, color, disability, ethnicity, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, race, religion, sex, gender, sexual orientation, pregnancy, protected veteran status, or any other bases under the law.

Application deadline:

Review of applications will begin on October 1, 2021 and continue until the position is filled.