



THE OHIO STATE UNIVERSITY

Tenure-Track Faculty Position Human-Autonomy Teaming

Department of Integrated Systems Engineering
Search Chair: Professor W.S. Marras

The Department of Integrated Systems (ISE) at The Ohio State University, one of the nation's top ten public universities, invites applications for a tenure-track position focusing on Human-Autonomy Teaming in the Cognitive Systems Engineering (CSE) group, primarily at the Assistant or Associate Professor rank. An earned doctorate in a field relevant to this research focus and closely related to Industrial Engineering or Systems Engineering is required. ISE offers degrees (BS, MS and Ph.D.) in Industrial and Systems Engineering, and its undergraduate and graduate programs are consistently among the top programs ranked by USNWR. The ISE Department has a long history of research and teaching in human factors, including a 30+ year history of leading edge research on human systems as increasingly autonomous capabilities are developed and deployed, and the CSE group teaches Undergrad and Grad courses on this theme and related areas including human systems integration, the design of distributed work systems and resilience engineering. OSU offers a wealth of collaboration opportunities through cross-disciplinary programs with artificial intelligence, ethics, data analytics, cognition & decision making, and industrial design.

Today's autonomous technologies are producing profound and wide-reaching changes in human-machine systems in every industry sector including new complexities and scales of activity. The changes underway create career-defining research opportunities for innovators, especially because the CSE group has extensive field research experience in transportation, aviation, space, energy, health care, financial systems, security, defense, web engineering, disaster response, and others. This position will build on Ohio State's major related initiatives including: CSE/ISE's collaboration with our medical center as it embarks on a new \$2 billion hospital; the College of Engineering's partnership in the Columbus Smart Cities initiative (with \$50 million in new USDOT and state funding) and operation of OSU's commercial airport; OSU's participation in the Transportation Research Center with its new \$50 million autonomous testing track, which will be the largest in the world.

This faculty member will have opportunities to leverage these and other partnerships to study how human systems change, grow, adapt, guide, and utilize the potential of increasingly autonomous technologies. This includes field research on the effects of deploying autonomous capabilities in critical functions, innovation of new design directions and concepts, and illustrative implementations with partners to demonstrate the viability and power of the new human-autonomy systems.

This research focus could include complex safety-critical and business-critical applications in fields such as air and ground transportation, cybersecurity, finance, web engineering/operations, and healthcare, as well as consumer-oriented products that leverage advances in computation, access to large data sets, and connectivity (e.g., the Internet of Things). Central Ohio also provides opportunities for many local partnerships with organizations such as American Electric Power, Battelle, Cardinal Health, Chase Bank, Honda, Huntington Bank, IBM Advanced Analytics Center, Nationwide Insurance, NetJets, and Wright Patterson Air Force Base.

This faculty member will teach undergraduate and graduate courses in ISE, attract research funding from federal, state and industry sources, supervise graduate student research, and disseminate the results of such research through high quality peer-reviewed publications.

Interested candidates should submit an application via Academic Jobs Online at <https://academicjobsonline.org/ajo/jobs/11830>. Applications must include a cover letter, curriculum vitae, a statement of current and future research interests, a statement of teaching philosophy, contact information for three to five references, and at least three published papers.

The Ohio State University College of Engineering is strongly committed to promoting diversity and inclusion in all areas of scholarship, instruction and outreach. **In the cover letter, describe experiences, current interests or activities, and/or future goals that promote a climate that values diversity and inclusion in one or more of these areas.**

The application deadline is October 1, 2018. Review of applications will begin on October 1, 2018 and will continue until the position is filled.