

Associate Professor Position in Complex Human and Natural Systems Modeling
University of Texas at Austin

The Vice President for Research at The University of Texas at Austin invites applications for a tenured Associate Professor in the area of Complex Systems Modeling of Human Infrastructure and Natural Systems. The successful candidate will develop a high-quality research program that integrates models for urban and/or natural systems to provide information for decision-making. This research area is a key component of a new, campus-wide initiative, called [Planet Texas 2050](#), which is addressing the challenges to Texas' resiliency in the 21st century given the projected driving forces of population growth and climate change. This initiative will address processes and feedbacks across the breadth of natural resources in Texas (and elsewhere) and how future demands and global change will impact regions and municipalities. In natural systems, these processes and feedbacks include those within and between climate and hydrologic systems, ecosystems, and biogeochemical cycles. In human systems, the design and development of resilient cities will require research that effectively accounts for rapidly changing cities and the complex connections between various components of urban and social infrastructure. Projections for future change in complex urban infrastructure systems and their connections to and impact on changing natural systems will bear on the design of resilient cities, forensic analyses of disasters, and understanding challenges to public health in the 21st century. Texas is a sentinel region in terms of these driving forces and impacts, and integrated models developed here will have wide application beyond the state.

The successful candidate will have strong modeling and/or data analytics skills, and demonstrated ability to develop and apply models such as those described, integrate research across disciplines, and build interdisciplinary research teams. The academic home for this position will be in either the Department of Geological Sciences (DGS) or the Department of Civil, Architectural and Environmental Engineering (CAEE), with potential affiliations and collaborations with UT Austin's Institute for Computational Engineering and Sciences, the Texas Advanced Computing Center, the Center for Sustainable Development, the Environmental Science Institute, the Energy Institute and the Dell Medical School.

As part of the [Jackson School of Geosciences](#), DGS has over 50 faculty and a community of research staff with a broad range of specialties, as well as access to outstanding research facilities and support. The department has one of the largest combined graduate and undergraduate enrollments of any Earth science program in North America, and is ranked #1 in Geology graduate programs. In the [Cockrell School of Engineering](#), CAEE has over 55 faculty and several research centers and related staff, as well as state-of-the-art research labs. The CAEE department is ranked #2 in graduate programs in Civil Engineering, and #4 at the undergraduate level.

Applicant Instructions: Applicants must have an earned PhD degree or equivalent. Interested and qualified individuals should submit materials in electronic form to <https://apply.interfolio.com/56233>. Requested application documents include a cover letter, curriculum vitae, a statement of research, statement of teaching, statement outlining your contributions to diversity, and contact information for at least 3 references. Review of applications will begin on December 10, 2018.

The University of Texas at Austin, as an equal opportunity/affirmative action employer, complies with all applicable federal and state laws regarding nondiscrimination and affirmative action. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, national origin, age, marital status, sex, sexual orientation, gender identity, gender

expression, disability, religion, or veteran status in employment, educational programs and activities, and admissions.