The Department of Civil and Environmental Engineering (CEE) at the University of Illinois Urbana-Champaign is seeking to fill at least two full-time tenured or tenure-track faculty positions at any rank in the following areas:

(1) **Artificial Intelligence (AI) for Construction Engineering and Management** with the potential to enhance construction productivity, cost and schedule performance, safety, sustainability, and resilience of the built environment. This includes but not limited to the research areas of machine learning, computer vision, natural language processing, and rule-based systems for (a) design and construction optimization; (b) construction productivity, scheduling, cost estimating, safety, documentation; (c) project monitoring and control; (d) construction robotics and modular construction; (e) modeling and analysis of construction products, processes and organizations; (f) energy and lifecycle analysis of buildings and infrastructure systems, and (g) engineering and management of extreme events.

(2) **Geotechnical Engineering** with a focus on natural hazards, remote sensing, and modeling and evaluation of the impacts of climate change on surface and subsurface geo-materials to identify and address risks to the built and natural environment. This focus area encompasses field, laboratory, analytical, and numerical studies of geomaterials and use of terrestrial (e.g., LIDAR) and space-based (e.g., InSAR) remote sensing tools for hazard characterization and to improve infrastructure resilience to extreme events and geohazards.

(3) **Railway Systems and Railroad Track Engineering** with expertise in one or more of the following areas: rail capacity analysis and modeling, rail transit, high-speed and intercity passenger rail, rail network and planning, rail freight transportation operation, logistics and economics, advanced train control, computer-aided railway traffic control, and automated train operating systems, integrated passenger and freight railway system safety and risk analysis, railroad track engineering, and mechanistic design of track system and rail terminals.

All qualified junior and outstanding senior candidates will be considered. Candidates from under-represented groups are strongly encouraged to apply. Faculty members in the department are expected to initiate and sustain a vigorous research program. The Department of Civil and Environmental Engineering is committed to building a culturally diverse educational environment. Successful candidates are expected to demonstrate a strong commitment to undergraduate and graduate teaching, and to diversity, equity, and inclusion through research, teaching, and/or service endeavors.

Qualified senior candidates may also be considered for tenured Associate Professor and Full Professor positions as part of the Grainger Engineering Breakthroughs Initiative. Over the next few years, more than 35 new endowed professorships and chairs will be established in areas of strategic interest to The Grainger College of Engineering, which can be found at [https://grainger.illinois.edu/research/initiatives/gebi](https://grainger.illinois.edu/research/initiatives/gebi).
To apply, please create a candidate profile at http://jobs.illinois.edu. The application package should include a statement of teaching interests, statement of research interests, statement on commitment to diversity, a curriculum vitae, and a publication list, all in a single PDF file as an upload in the “CV/Resume” section. The statement on diversity should address past and/or potential contributions to diversity, equity, and inclusion through research, teaching, and/or service. Examples of such statements and guidance can be found at https://grainger.illinois.edu/about/diversity/guidelines. Candidates for tenure-track positions must provide names and contact information for three letters of reference in the application file. Candidates for tenured positions must have achieved national and international recognition for their scholarship; selected senior candidates will be contacted to provide references.

The Department of CEE at Illinois has a long tradition of excellence in fundamental and translational research, teaching, and service. The Department currently has 58 faculty, $20 million research expenditures, and 680 undergraduate and 560 graduate students. Details about the Department faculty, research portfolio, facilities, equipment, and academic programs can be found at https://cee.illinois.edu/.

At the time of appointment, applicants must hold an earned doctorate in an appropriate field. Salary and rank will be commensurate with qualifications. The expected start date is August 16, 2023, but this is negotiable.

To ensure full consideration, applications must be received by October 31, 2022. Applications will be accepted until the position is filled. Early applications are strongly encouraged as interviews may take place during the application period, but a hiring decision will not be made until after the closing date.

For any questions concerning the application process, please contact Stacie Mertes at smertes@illinois.edu.

We have an active and successful dual-career partner placement program and a strong commitment to work-life balance and family-friendly programs for faculty and staff (https://provost.illinois.edu/faculty-affairs/work-life-balance/).

The University of Illinois System is an equal opportunity employer, including but not limited to disability and/or veteran status, and complies with all applicable state and federal employment mandates. Please visit Required Employment Notices and Posters to view our non-discrimination statement and find additional information about required background checks, sexual harassment/misconduct disclosures, COVID-19 vaccination requirement, and employment eligibility review through E-Verify.

Applicants with disabilities are encouraged to apply and may request a reasonable accommodation under the Americans with Disabilities Act (2008) to complete the application and/or interview process. Requests may be submitted through the reasonable accommodations portal, or by contacting the Accessibility & Accommodations Division of the Office for Access and Equity at 217-333-0885, or by emailing accessibility@illinois.edu.