

Arizona State University: Ira A. Fulton Schools of Engineering School of Sustainable Engineering and the Built Environment

Professor (all ranks) in Smart Infrastructure Systems Location: Arizona State University – Tempe Campus

The Ira A. Fulton Schools of Engineering at Arizona State University (ASU) and the School of Sustainable Engineering and the Built Environment seeks applications for a tenured or tenure-track faculty position in the field of smart infrastructure systems. Appointment may be at the **Assistant, Associate or Full Professor** rank commensurate with the candidate's experience and accomplishments. The projected start date is August 2019, but accommodation can be made for the best candidate.

Candidates will have a Ph.D in engineering, or a closely related field, with a research and scholarly focus on smart infrastructure systems, including cities designed and treated as a network of networks; decision making and systems engineering based on sensor networks, physics-based models, and machine learning; and real-time communication and data analytics for optimal operation of urban infrastructure. Candidates whose work involves analyzing and modeling inter-dependencies among myriad networks (e.g., transportation, water, power, communications), identifying and mitigating vulnerabilities through the engineering of smart and connected systems, and designing smart and connected communities of the future are also encouraged.

Job responsibilities include developing an internationally recognized and externally funded research program, teaching undergraduate and graduate courses, engaging in entrepreneurial activities, mentoring graduate students and undertaking service activities as appropriate to their rank. Professional engineering licensure or the ability to obtain registration in a timely manner is desirable. As part of its New American University initiatives, ASU seeks candidates in smart infrastructure systems research whose work aligns with addressing critical infrastructure grand challenges, environmental impacts, global health, and sustainable technologies across multiple spatial and temporal scales.

Although tenure home may be in any of the Ira A. Fulton Schools of Engineering, the School of Sustainable Engineering and the Built Environment is currently the most involved in the interest areas of the search.

QUALIFICATIONS

Required Qualifications:

- Ph.D in engineering or a closely related field by the time of appointment.
- Research and scholarly focus on smart and connected urban infrastructure, analysis and modeling of cities as a network of networks, big data and predictive analytics, deep learning and AI applications in infrastructure planning, and/or decision making and systems engineering for optimizing urban infrastructure.
- Commitment to teaching excellence and professional service as appropriate to the candidate's rank.

Preferred Qualifications:

- Professional engineering licensure or the ability to obtain registration in a timely manner is desirable.

The successful candidate will support the mission of the Ira A. Fulton Schools of Engineering, and is expected to participate in interdisciplinary research and teaching endeavors both within the Fulton Schools and across campus. The School of Sustainable Engineering and the Built Environment has 52 tenured and tenure-track faculty members, approximately 1300 undergraduate and 400 graduate students, and generates annual research expenditures in excess of \$18 million per year. The School is home to several key academic programs at the undergraduate and graduate levels: Civil, Environmental, and Sustainable Engineering; Environmental Engineering; Construction Management; and Construction Engineering.

APPLICATION INSTRUCTIONS

Review of applications will begin **December 14, 2018**; if not filled, review of applications will occur on the 1st and 15th of the month thereafter until the search is closed. Apply at <https://hiring.engineering.asu.edu/>. Candidates will be asked to submit the following through their Interfolio Dossier:

- Cover letter
- Curriculum vitae
- Statement describing research interests
- Statement describing teaching interests
- Statement describing professional goals
- Contact information for 3-5 references

For more information or questions about this position, please contact the search committee chair Matthew Fraser via email at mpfraser@asu.edu.

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law. See ASU's full non-- discrimination statement (ACD 401) at <https://www.asu.edu/aad/manuals/acd/acd401.html> and the Title IX statement at <https://www.asu.edu/titleIX/>.