



COLLEGE OF ENGINEERING FACULTY POSITION IN THE LYLES SCHOOL OF CIVIL ENGINEERING

The Lyles School of Civil Engineering at Purdue University invites applications for a tenured/tenure-track faculty position at all ranks. Purdue University seeks to attract exceptional candidates with interests and expertise in Data Science in Geomatics. Successful candidates must hold a Ph.D. degree in Civil Engineering or a related discipline and demonstrate excellent potential to build an independent research program at the forefront of their field, as well as potential to educate and mentor students. The successful candidate will conduct original research, advise graduate students, teach undergraduate and graduate level courses, and perform service both at the School and University levels. Candidates with experience working with diverse groups of students, faculty, and staff and the ability to contribute to an inclusive climate are particularly encouraged to apply.

Candidates are expected to demonstrate how their academic background as well as current and future research and teaching are related to the acquisition, processing, and interpretation/analysis of geo-spatial data from multi-sensor/multi-platform remote sensing systems at a variety of scales (local, regional and/or global scale) to support data science applications in one or more of the following fields: land use/land cover and 3D mapping, infrastructure monitoring, autonomous and connected vehicles, environmental applications, construction management, geotechnical engineering, hydraulics engineering, precision agriculture, etc.

The desired expertise for this position includes, but is not limited to: data acquisition, processing, integration, analysis, modeling and decision support, with emphasis on one or more of the following activities:

- Position and orientation estimation using survey-grade and consumer grade navigation systems (including smartphones);
- Geo-spatial and temporal (4D) modeling and implementation of advanced technologies based on multi-sensor and multi-dimensional data sources, including active (LiDAR and/or Radar) and passive (visible, multispectral, and hyperspectral) sensor data;
- Enhancements of sensor technologies to improve precision, resolution, stability, and the ability to generate new data;
- Sensor networks for scientific and engineering applications;
- Geo-spatial big data analytics, including machine learning and visualization;
- Advanced surveying engineering using multi-modal remote sensing systems on a wide range of mapping platforms (e.g., underground, indoor and outdoor wheel-based systems, underwater drones, UAS, airborne and/or space borne platforms);
- Database management and data processing techniques for large geo-spatial datasets;
- System integration for field data collection and development of data processing software.

Submit applications online at <https://engineering.purdue.edu/Engr/AboutUS/Employment/Applications>, including curriculum vitae, teaching and research plans, and names and addresses of five references. For information/questions regarding applications, contact the Office of Academic Affairs, College of Engineering, at coeacademicaffairs@purdue.edu. Review of applications will begin on October 1, 2018 and will continue until the position is filled. A background check will be required for employment in this position.

Purdue University's Lyles School of Civil Engineering is committed to advancing diversity in all areas of faculty effort, including scholarship, instruction, and engagement. Candidates should address at least one of these areas in their cover letter, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion. Details about the School of Civil Engineering, its current faculty, and research may be found at <https://engineering.purdue.edu/CE/>

Purdue's main campus is located in West Lafayette Indiana, a welcoming and diverse community with a wide variety of cultural activities, events, and industries. Purdue and the College of Engineering have a [Concierge Program](#) to assist new faculty and facilitate their relocation.

Purdue University is an EOE/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.