



The Geo-Institute Innovative Technologies & Tools in Geotechnical Engineering Board Committee will live-stream the session “**Distributed Fiber Optic Sensing for Geotechnical Applications**” on Tuesday, December 3, at 2pm EST. The topics include:

“Distributed Fiber Optic Sensing for Geotechnical Applications” **Andrew Yeskoo, Ph.D** and **Kenichi Soga, Ph.D**

Distributed Fiber Optic Sensing (DFOS) describes a range of technologies for generating distributed, near-continuous measurement fibers along fiber optic cable. DFOS technologies are divided by the physical parameters they are sensitive to – strain (mechanical and thermal), temperature, and acoustic vibration. All three technologies have applications within geotechnical engineering and have been successfully deployed across a range of projects in the US and abroad. The transition from discrete to distributed sensing can provide insight into the real behavior of the soil and subsurface structures, with applications ranging from soil displacement, geophysical imaging, pile load test monitoring, and thermal modeling. This session will provide an overview of the available DFOS technologies, some practical considerations to keep in mind when applying them to geotechnical monitoring, and several case studies where DFOS has been deployed within geotechnical monitoring.