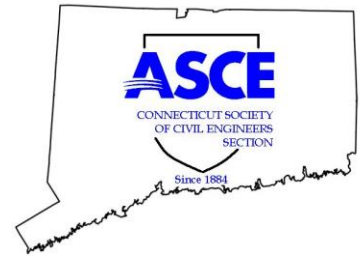




**GEO-  
INSTITUTE**  
Connecticut Valley  
Chapter

**2025 Spring Geotechnical Seminar  
TPC River Highlands  
Cromwell, Connecticut  
April 25, 2025**



**The 2025 Spring Geotechnical Seminar explores the use of advanced computing tools and artificial intelligence for geotechnical applications. Seven (7) New York State PDHs will be offered.**

*Questions and discussion will follow each presentation.*

<b>7:00 AM - 7:30 AM</b>	<b>Exhibitor Setup</b>
<b>7:30 AM - 8:10 AM</b>	<b>Full Breakfast &amp; Registration</b>
<b>8:10 AM - 8:20 AM</b>	<b>Welcome, Announcements, and Opening Remarks</b>
<b>8:20 AM – 9:00 AM</b>	<b>Challenges and Opportunities for Numerical Modeling in Geotechnical Engineering in the time of Machine Learning and AI</b> Juan M. Pestana, Sc.D., P.E., BC.GE., F.ASCE, of Geosyntec Consultants and Tufts University
<b>9:00 AM – 9:30 AM</b>	<b>Advancing Regional Landslide Risk Assessment with Integrated AI-Physics Solutions</b> Xin Wei, Ph.D., of University of Michigan
<b>9:30 AM – 10:00 AM</b>	<b>Cross-Scale Mechanical Characterization of Rock via Big Data-Based Nanoindentation</b> Shengmin Luo, Ph.D., A.M.ASCE, of Western New England University
<b>10:00 AM - 10:30 AM</b>	<b>Morning Break with Exhibitors and Refreshments</b>
<b>10:30 AM - 11:05 AM</b>	<b>A State-of-the-Art Surface Wave Analysis Technique for Investigating the Root Cause of a Cracking Slab: A Case History</b> Antonios Vytiniotis, Ph.D., P.E. and Seda Gokyer Erbis, Ph.D., P.E., of Geocomp
<b>11:05 AM – 11:35 AM</b>	<b>Large Language Model (LLM) Applications in Geotechnical Engineering</b> Steve Chai, M.Asc., P.Eng., of Rocscience
<b>11:35 AM - 12:15 PM</b>	<b>Practical Generative AI Applications in Geotechnical Design</b> Nick Machairas, Ph.D., of Haley & Aldrich
<b>12:15 PM - 1:10 PM</b>	<b>Lunch with Exhibitors + Golf Putting Tournament</b>
<b>1:10 PM - 1:20 PM</b>	<b>Presentation of 2025 GEO-CT Student Scholarship Awards</b>
<b>1:20 PM - 1:50 PM</b>	<b>Generative AI Workshop</b> Nick Machairas, Ph.D., of Haley & Aldrich
<b>1:50 PM - 2:20 PM</b>	<b>The Ethics of Artificial Intelligence in Engineering</b> Frederick E. Hedberg, Esq., P.E., of Robinson + Cole
<b>2:20 PM – 2:50 PM</b>	<b>Afternoon Break with Exhibitors</b>
<b>2:50 PM - 3:25 PM</b>	<b>AI-Driven Approach in Creating a Historical Subsurface Data Asset</b> Scott L. Deaton, Ph.D., of Dataforensics
<b>3:25 PM – 4:00 PM</b>	<b>New Developments in Transportation Geotechnics: Digital Geotechnical Tools, Processes, and Workflow</b> Derrick Dasenbrock, P.E., BC.GE, F. ASCE, of the Minnesota Department of Transportation
<b>4:00 PM</b>	<b>Closing Remarks &amp; PDH Processing</b>