

Civil Engineering

<i>Expertise</i>	Soil Mechanics, Geotechnical Engineering
<i>Education</i>	Ph.D. (Engineering), 2009, University of Cambridge, UK M.S. (Civil & Environmental Engineering), 2002 Massachusetts Institute of Technology, USA B.S. (Civil & Structural Engineering, 1st Class Honors), 2001 University of Sheffield, UK
<i>Honors & Awards</i>	Fellowship of the Cambridge Overseas Trust, 2007 Cambridge Overseas Trust Scholarship, 2004-2007 Overseas Research Student Award, 2001 Student Prize from the Institution of Civil Engineers (ICE), 2001 Marshalls Masonry Prize for the Best Masonry-Related Project, 2001
<i>Affiliations</i>	Member: American Society of Civil Engineers (ASCE); British Geotechnical Association (BGA). Graduate Member, Institution of Civil Engineers (ICE, UK)
<i>Registrations</i>	Professional Engineer (Civil), California, 2009 Certified Nuclear Gauge Operator, California, 2003
<i>Professional Experience</i>	
<i>2009 - Present</i>	<i>Itasca Consulting Group, Inc., Minneapolis, Minnesota Project Engineer</i>
<i>2004 - 2008</i>	<i>University of Cambridge, Department of Engineering, Cambridge, UK Research Assistant, Teaching Assistant</i>
<i>2002 - 2004</i>	<i>Camp, Dresser & McKee, Inc., Irvine, California Staff Geotechnical Engineer</i>

Project Experience

Numerical Modeling: PFC3D investigation of possible soil-creep mechanisms implementing self-defined contact models written in C++. Collaboration with University College London to promote use of DEM in Geotechnical Engineering. Use of FEM, DEM, and Excel and MATLAB, for data analysis. Use of various engineering software, including AutoCAD, PLAXIS, FLAC, STEDwin, GeoSlope and gINT.

Geotechnical Engineering: Geotechnical and environmental site investigations, including geological field mapping, cone penetration tests, hollow-stem auger borings, mud rotary boring, compaction tests, in-situ pump tests and installation of wells. Periodic monitoring of field instrumentation, including inclinometers and piezometers. Laboratory soil tests, such as triaxial, oedometer, sieve analysis and Atterberg limits tests. Engineering consultancy, preparation of recommendation reports and management of engineering projects with regard to cost and time control. Advanced engineering analysis and design calculations for foundation systems, settlement, excavation support, slope stability and seismic hazards. Participation in a wide variety of projects involving wastewater treatment plants, large water-storage reservoirs, dams, seismic retrofit of bridges, tunneling and environmental risk assessment.

Teaching: Undergraduate courses in Structures, Soil Mechanics and Hydraulics. Instruction in conducting laboratory tests and experiments in Geotechnics.