

**Geomechanics**

**Expertise** Rock Mechanics, Hydromechanics, Computational Mechanics Methods, Geomechanical Numerical Modeling Software Development, C++ Programming

**Education** Ph.D. (Civil Engineering (Computational Geomechanics)), 2008  
University of Toronto, Canada  
M.Sc. (Civil Engineering (Mechanics of Materials and Structures)), 2003  
Sharif University of Technology, Tehran, Iran  
B.Sc. (Civil Engineering), 2001  
University of Tehran, Iran

**Professional Affiliations** Member, Professional Engineers of Ontario (PEO)

**Honors & Awards** NSERC Industrial Research and Development Fellowship  
Rocscience Inc., 2008-2010

**Professional Experience**

2011 - Present *Itasca Consulting Group, Inc., Minneapolis, Minnesota*  
*Geomechanics Engineer*

2008 - 2011 *Rocscience, Inc., Toronto, Canada*  
*Computational Geomechanics Specialist*

2008 - 2010 *Civil Engineering Department, University of Toronto, Toronto, Canada*  
*Sessional Lecturer*

2003 - 2008 *Lassonde Institute, University of Toronto, Canada*  
*Computational Geomechanics Research Assistant*

2001 - 2003 *Sharif University of Technology, Tehran, Iran*  
*Computational Mechanics Research Assistant*

2001 - 2003 *Sazeh Co., Tehran, Iran*  
*Structural Engineer*

**Project Experience**

**Rock Mechanics:** Research on the mechanics of jointed rock masses, constitutive behavior of anisotropic rocks, mechanics of hydromechanically coupled media and fluid flow problems, buckling and instability analysis of layered rocks and brittle spalling in underground excavations.

**Geomechanical Numerical Modeling:** Numerical modeling of problems with pre-existing microstructures using continuum and discrete methods, numerical modeling of hydromechanically coupled problems and slope stability analysis.

*Software Development:* More than nine years of experience in various aspects of finite-element software development.

*Teaching:* Taught mechanics and geotechnical courses for the Civil Engineering Department of the University of Toronto as an invited sessional lecturer.