

## **Senior Geomechanics Engineer**

Expertise Geomechanics, Mining Engineering)

Education M.S. (Geotechnical Engineering), 2011

Northwestern University, Chicago, Illinois

M.S. (Mining Engineering), 2007

The Pennsylvania State University, State College, Pennsylvania

M.S. (Mining Engineering), 2002

China University of Mining & Technology, Beijing, China

B.S. (Mining Engineering), 1999

China University of Mining & Technology, Xuzhou, China

Professional Affiliations Member, American Society of Civil Engineers (ASCE)

Member, Society for Mining, Metallurgy and Exploration (SME)

*Honors* Walter P. Murphy Fellowship, Northwestern University (2008-2009)

Anne C. Wilson Graduate Research Award, The Pennsylvania State

University (2005)

## **Professional Experience**

2015 – Present 2011 – 2015	Itasca Consulting Group, Inc., Minneapolis, Minnesota Senior Geomechanics Engineer Geomechanics Engineer
2008 – 2011	Northwestern University, Dept. of Civil & Environmental Engineering Research Assistant, Geotechnical Engineering
2004 – 2007	The Pennsylvania State University, Department of EGEE Graduate Assistant, Mining Engineering
2003 – 2004	China Coal Research Institute, Beijing, China Assistant Engineer
	China University of Mining & Technology, Beijing, China

Graduate Assistant, Mining Engineering

1999 - 2002



## Project Experience

## Civil Projects:

Sinkhole slope stability evaluation using FLAC. Investigation on deformations of the corrugated metal arch induced by foundation settlement using FLAC. Assessment of settlements caused by excavation of tunnels and consolidation settlements over time using FLAC. Evaluated earth pressure on cantilever sheet-pile walls with retained slopes. Conducted a finite-element parametric study using PLAXIS for a range of conditions encountered in practice, and provided guidance regarding the selection of appropriate design pressure. Performed laboratory tests on Chicago stiff clay to investigate small-strain response, and conducted PLAXIS simulations using a hypoplastic model.

Mining Projects: Mine-void detection using geophysical methods. Experimental design, field surveys and seismic data analysis using MATLAB. Database development using Access. Wave velocities measurements on rock and coal samples. Numerical analysis of longwall mining.

Software Development: Development, support, training for FLAC.