

**Mining, Geological Engineer**

**Expertise** Mathematical and numerical modeling of geophysical systems

**Education** Ph.D. (Applied Fluid Mechanics), 2006  
BP Institute, University of Cambridge, England  
B.S. (Geology with Honors), 2002  
Edinburgh University, Scotland

**Professional Experience**

2006 - Present *Itasca Consulting Group, Inc., Minneapolis, Minnesota*  
*Project Engineer / Software Developer*

1998 - 2006 *University of Cambridge, England*  
*Teaching Assistant (2002 - 2006)*  
*Web Design and Maintenance (1998 - 2006)*

2001 *BP Aberdeen, Scotland*  
*Student Internship*

**Project Experience**

*Research:* Fluid flow coupling with DEM models. Numerical modeling of rock blasting. Hydrocarbon reservoir flow. Mathematical modeling of magma and other geological material flows.

*Consulting:* Hydrocarbon reservoir monitoring, wind-turbine foundation stability analysis.

*Software:* Itasca software developer, C/C++ programming, data visualization, Python, and Mathematica.