

Mining, Geological Engineer

Expertise Mathematical and numerical modeling of geophysical systems.

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

Distinctions Cambridge overseas trust honorary scholar, Cambridge College Summer Seminar Instructor.

Professional Experience

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

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

2001 *BP Aberdeen, Scotland*
Student Internship

Project Experience

Fieldwork: Member of the Magnus Subsurface Team, which provided geosciences and engineering services for a UK North Sea oil field. Experience with Schlumberger's Eclipse[®] reservoir engineering product.

Geotechnical Modeling: Participation with geologists and engineers on creating forward models of hydrocarbon reservoir performance using a synthesis of seismic and petrophysical data. Development flow models of water, oil and gas in subsurface hydrocarbon reservoirs. Uncertainty analysis of the use of time-lapse seismic data for active reservoir management. Mathematical modeling of magma flow in the Earth's crust. Experimental techniques of model verification.

Software: Experience with C/C++ programming and data visualization, Unix/Linux, LaTeX, Python, Databases, Mathematica, and Matlab.