

Project Hydrogeologist***Expertise***

Unsaturated Soil Mechanics, Soil Characterization, Groundwater Flow and Slope Stability Modeling, Geographic Information Systems, Natural Hazard and Risk Assessment

Education

Ph.D. (Engineering/Civil), 2011, Colorado School of Mines

M.S. (Geological Engineering), 2004

B.S. (Geological Engineering), 2002

Middle East Technical University, Ankara, Turkey

Professional Experience

2011 – Present

*Itasca Denver, Inc., Colorado
Project Hydrogeologist*

2008 – 2011

*USGS, Golden, Colorado
Visiting Scientist*

2008 – 2011

*Colorado School of Mines, Civil Engineering, Golden, Colorado
Graduate Research Assistant*

2002 – 2008

*Middle East Technical University, Geological Engineering, Ankara, Turkey
Remote Sensing/GIS Laboratory
Graduate Research Assistant*

Project Experience

Development of analytical tool to assess landslide occurrence following large earthquakes. Analysis of elevation changes detected from multi-temporal LIDAR surveys of forested landslide terrain. Stability of unsaturated infinite slopes under transient infiltration conditions. Direction of unsaturated flow in a homogeneous and isotropic hill slope. Stress invariant-based scalar field of factor of safety for analysis of slope stability under infiltration. Data collection, digitizing, database generation, production of cartographic maps/tables and figures for reports, presentations and publications.

Field Experience

Landslide monitoring installation, field equipment installation to monitor flow direction in a hill slope, Total station and GPS survey, self-potential geophysical survey.

Laboratory Experience

Characterization of soil-water retention curves and unsaturated shear-strength properties.