

Jesse Amundsen

Programmer, Geologist, GIS Technician

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Education

- Fall 2010 **Certificate in Geographic Information Systems**, *Northern Kentucky University, Highland Heights, KY.*
- Spring 2006 – Spring 2010 **B.S., Geology with minors in Computer Science and Geography (Summa Cum Laude)**, *Northern Kentucky University, Highland Heights, KY.*

Experience

Research

- Fall 2010 **Directed Research**, *Northern Kentucky University, Highland Heights, KY.*
- Continued postbaccalaureate work using LiDAR-derived DEM's to delineate and characterize landslides
- Spring 2010 **Independent Research**, *Northern Kentucky University, Highland Heights, KY.*
- Delineating and characterizing landslides in Northern Kentucky and southwest Ohio using LiDAR-derived DEM's
- Fall 2008 **Directed Research**, *Northern Kentucky University, Highland Heights, KY.*
- Studied methods for approximating failure envelopes with a focus on the Mohr-Coulomb failure criterion

Teaching

- Spring 2010 **Undergraduate Teaching Assistant**, *Northern Kentucky University.*
- Created activities for a section of geomorphology focusing on using GIS for the analysis of landforms and assisted on field trips and during laboratories
- Spring 2009 **Undergraduate Teaching Assistant**, *Northern Kentucky University.*
- Prepared labs, graded papers, and tutored students outside of class for a section of Structural Geology

Employment

- June 2009–Present **CostQuest Associates**, *Cincinnati, OH.*
- Primarily employed as a .NET programmer (C#, VB.NET), database engineer, and GIS analyst focusing on providing spatial support for cost models

Presentations

- Fall 2011 **"Identification and Delineation of Previously Unreported Landslides in Cincinnati and Northern Kentucky using LiDAR-Derived Maps"**, *Abstract*, Association of Environmental & Engineering Geologists, Anchorage, AK.
- Spring 2010 **"Open source geographic information systems (GIS)"**, *Oral Presentation*, The Ohio State University, Columbus, OH.

- Fall 2009 **“Improving approximations of the Mohr-Coulomb failure envelope”**, *Poster Presentation*, Geological Society of America, Portland, OR.
- Spring 2009 **“An Exploration of the Mathematical Properties and Relationships of the Mohr-Coulomb Failure Envelope”**, *Poster Presentation*, Celebration of Research and Creativity, Northern Kentucky University, Highland Heights, KY

Honors & Achievements

- April 2010 **Outstanding Senior in Geology**, *Department of Physics & Geology*, Northern Kentucky University, Highland Heights, KY.
- Who's Who Among Students**, *Directory Listing*.
- GRE (Verbal/Quantitative/Writing): 510/770/4.5.**

Grants Awarded

- Fall 2009 **Student Presentation/Publication Award**, *Northern Kentucky University*, Highland Heights, KY, \$400.

Computer skills

Programming	MATLAB, .NET, Python, HTML/CSS, L ^A T _E X, T-SQL	Software	Adobe Creative Suite, ArcGIS, Microsoft Office
Operating Systems	Linux, Windows		

Professional Affiliations

- Geological Society of America**, *Student Member*.
- Kentucky Academy of Science**, *Student Member*.

Personal Interests

I enjoy mountaineering, rock climbing, and playing the piano.