

Geoffrey A. Muhlestein

2620 W 14400 S, Bluffdale, UT 84065

(719) 232-5984

gmuhlest@uccs.edu

Education

Master of Arts, Geography

Expected: May 2009

University of Colorado, Colorado Springs, CO

Related course work: Geographic Information Systems (GIS), Remote Sensing, Geomorphology, Environmental Problems and Solutions

Bachelor of Science, Geology

May 2006

Southern Utah University, Cedar City, UT

Related course work: Stratigraphy, Sedimentology, Petrology, Mineralogy, Paleontology, Weather and Climate, Physics, Chemistry, Calculus

Certificate, Geographic Information Systems

May 2006

Southern Utah University, Cedar City, UT

Related course work: GIS, Remote Sensing, Statistics, Database Management, Programming, GPS Technologies

Associate of Science

June 1997

Dixie State College, St. George, UT

Related course work: General undergraduate coursework

Experience

GIS Specialist and Staff Scientist, Applied Weather Associates, Bluffdale, UT

(November 2006- current)

Conceptualize, implement, and document various GIS applications to aide in peer-reviewed Site-Specific Probable Maximum Precipitation (PMP) studies, orographic precipitation inflow barrier analysis, forensic meteorology, and storm analysis. Production of maps for use in proposals, presentations, and final reports. Assist in data-mining, data management, and report compilation.

GIS/GPS Instructor, Southern Utah University, Cedar City, UT (Summer Semester 2006)

Instructed two sections of the GIS/GPS portion of the Southern Utah University Geology Field Camp. Educated students on general GPS overview, hands-on use of the Trimble GeoExplorer GPS receiver, use of Pathfinder Office software, and use of ArcGIS 9.1 software at the introductory level.

Private Science Tutor, State of Utah, Cedar City, UT (January 2006 - July 2006)

Assisted a special needs undergraduate student with conceptualization, critical thinking, and problem solving skills in GIS, Programming, Statistics, and Mineralogy curriculum.

GIS Technician, Utah Geological Survey (Internship through Southern Utah University), Cedar City, UT (December 2004 - July 2005)

Used GIS software to digitize and attribute the digital version of the Geologic Map of the Abajo Mountains 1:50,000 scale and Geologic Map of Jordan Narrows 1:24,000 scale.

Skills/Abilities

Critical Thinking and Problem Solving

- Ability to integrate Geographic Information Science, Statistical Analysis, Remote Sensing, Computer Science, and Earth Systems Science to efficiently evaluate and solve real world problems
- Experienced with the utilization, adaptation, and customization of the current leading GIS software and related applications as a dynamic toolset for problem solving
- Familiar with contemporary cartographic techniques used in producing professional maps and dynamic animations to clearly illustrate geographic information and research results

Software and Computer Skills

- ESRI's ArcGIS 3.X, 9.X GIS software
- ERDAS and IDRISI remote sensing software
- DeLorme TopoUSA, Pathfinder Office, and StreetMap USA cartographic/GPS software
- Microsoft Excel, Word, and PowerPoint office software
- Oracle 10g and Microsoft Access database software
- Familiar with Microsoft Windows, Mac OS X, and LINUX/UNIX operating systems
- Familiar with Object-Oriented languages such as Visual Basic and C++, scripting languages such as VBscript and Python, and the SQL database query language

Communication

- Comfortable and experienced in presenting research to groups in both slideshow and poster format in a clear and concise manner
- Possess professional writing skills needed for the communication of scientific research, procedures, discussion, and results

Reports/Research

- Tomlinson, E.M., Kappel, W.D., Parzybok, T.W., Hultstrand, D., **Muhlestein, G.**, June, 2008: Site-Specific Maximum Precipitation Study for the DeForest Lake Drainage Basin, NY
- Tomlinson, E.M., Kappel, W.D., Parzybok, T.W., Hultstrand, D., **Muhlestein, G.**, April, 2008: Site-Specific Maximum Precipitation Study for the Florence Drainage Basin, AZ
- Tomlinson, E.M., Kappel, W.D., Parzybok, T.W., Hultstrand, D., **Muhlestein, G.**, January, 2008: Site-Specific Maximum Precipitation Study for the Magma Drainage Basin, AZ
- GIS and Cartography for map used in: SPAS analysis of Parzybok, T., Hultstrand, D., Rappolt, B., Tomlinson, E., Kappel, W., December 2007: SPAS analysis of Thunderstorm August 4, 2004, Thunderstorm July 14, 2005, and Thunderstorm August 12, 2006, Jimmy Creek Drainage Basin, Colorado Springs, CO
- Tomlinson, E.M., Kappel, W.D., Parzybok, T.W., Hultstrand, D., Rappolt, B., **Muhlestein, G.**, November, 2007: Site-Specific Maximum Precipitation Study for the Magma Drainage Basin, NE
- **Geoffrey A. Muhlestein**, Mark R. Colberg and David J. Maxwell, 2006: An Interactive Geologic Map of Cedar City and the Coal Creek Canyon Area, Iron County, Utah. Presented at the Geologic Society of America Conference, May 2006, Gunnison, CO and at the Utah Academy of Science, Ephraim, UT, April 2006
- Witkind, I.J., Cantor, H.G., Griffin, P.C., Tuttle, D.R., Marshall, G.L., 1964: Geologic Map of the Abajo Mountains Area, San Juan County, UT. GIS Compilation in 2006, Project Manager: Grant Willis, Utah Geological Survey. GIS: **Geoff Muhlestein**, Bryan Anderson, Luke Ambrose, and David J. Maxwell of Southern Utah University. Cartography and additional GIS by J. Buck Ehler, Utah Geological Survey