

Ryan Armstrong

1000 E. University Ave., Dept 3006, Laramie, WY 82071 • (260) 409-3911 • rarmstr1@uwyo.edu • ryanarmstrong.net

Education

University of Wyoming, Laramie August 2013 – May 2015 (expected)
M.S. candidate Advisors: Dr. W. Steven Holbrook and Dr. Clifford Riebe GPA: 3.80/4.00

Colorado College, Colorado Springs, Colorado September 2009 – August 2013
B.A. Physics Physics GPA: 3.60/4.00
B.A. Geology Geology GPA: 3.42/4.00
Overall GPA: 3.48/4.00
Senior thesis: “Repeating Earthquakes in the Darfield Region
New Zealand,” (<http://hdl.handle.net/10176/coccc:8121>)

Industry Experience

Geoscience Intern at Hess Corporation May 2014 – August 2014

- Reassessing the reliability of three-way closure plays against salt at two failed exploration well locations nearby a successful analogue. This project examines how Miocene sand deposition fairways affect sand distribution within these structures, closure robustness, and seal reliability in order to better understand the risk associated with these plays.

Contact: Geoffrey Bent – Geoffrey.Bent@hess.com

Graduate Research

Geophysical Research: WyCEHG Summer 2013 - Present

- Processing and spatial analysis of airborne electromagnetic (AEM) data to determine hydrologic implications of near surface resistivity anomalies in a mountain watershed. Research includes AEM processing techniques, resistivity anomaly verification through ground-based methods (ERT, NMR, etc.), and spatial analysis of data relative to geomorphological features.

Contact: Dr. W. Steven Holbrook - steveh@uwyo.edu

Undergraduate Research and Work Experience

Internship: Incorporated Research Institutions of Seismology Summer 2012

- IRIS intern at the University of Wisconsin – Madison under the direction of Dr. Ellen Syracuse. Used waveform cross-correlation methods to locate possible repeating earthquakes within fault segments in the Darfield Plains to the west of Christchurch, New Zealand.

Contact: Dr. Megan Anderson - Megan.Anderson@coloradocollege.edu

Tutoring: Quantitative Reasoning Center March 2012 – May 2013

- Tutored 100-300 level math, physics, and geology courses through the Quantitative Reasoning Center at Colorado College.
- Contact: Traci Freeman - traci.freeman@coloradocollege.edu

Computer Skills

Petrel, GeoX, Spotfire, UNIX, Geographic Information Systems, GMT, MATLAB, SGeMS, EarthImager, Geometrics Seismodular Controller, and SeisImager Pickwin

University of Wyoming Coursework:

Geophysics: Imperial Barrel Awards, Reservoir Modeling, Hydrogeophysics, Rock Physics, Reflection Seismology, Global Seismology, Inverse Modeling (Fall 2014), Wildland Hydrology (Fall 2014), MATLAB for Engineers and Scientists

Colorado College Coursework:

Physics: Solid State Physics, Modern Physics, Electronics, Experimental Techniques (statistics), Calculus 3, Vector Analysis, Linear Algebra

Geology: Sedimentation and Stratigraphy, Seismology, Geophysics, Geochemistry, Plate Tectonics, Geographic Information Systems, Fundamentals of Geologic Methods, field camp in New Zealand (Frontiers Abroad), Regional Studies (Pacific Northwest), Thesis (see Education).

Positions and Awards

- President of the IAMG Wyoming chapter 2014
- Secretary of the Wyoming Geophysical Survey 2014
- Member of the Colorado College Sustainability Council 2012-2013
- Volunteered with Cool Science in Colorado Springs 2013
- Graduate Stipend Augmentation Award – University of Wyoming 2013
- Donald B. Gould Scholarship – Colorado College 2013

Accepted Abstracts

Carr, Bradley, Armstrong, Ryan (Presenter), Holbrook, W. Steven, Pedersen, Jesper, Auken, Esben (2014), *Mapping Groundwater Recharge Zones and Lithology within a Mountainous Headwater Catchment Area of the Snowy Range near Laramie, WY with Airborne Electromagnetic and Magnetic Data*, SAGEEP, Abstract 182, SAGEEP, Boston, Massachusetts.

Armstrong, Ryan S., Holbrook, W. Steven, Auken, Esben, Carr, Bradley J. (2013), *Preliminary Airborne Electromagnetic Results from the Snowy Range and Laramie Range, WY*, Abstract 232-3 presented at annual meeting, GSA, Denver, CO, 27-30 Oct.

Armstrong, Ryan S., Syracuse, Ellen M., Thurber, Clifford H., Anderson, Megan L. (2012), *Repeating Earthquakes in the Darfield Region, New Zealand*, Abstract S21B-2511 presented at fall meeting, AGU, San Francisco, Calif., 3-7 Dec.

References

- Dr. W. Steven Holbrook, Professor of Geology and Geophysics, University of Wyoming, 307-366-6679, steveh@uwyo.edu
- Dr. Megan Anderson, Associate Professor of Geology, Colorado College, 719-389-6512, Megan.Anderson@coloradocollege.edu
- Dr. Paul Myrow, Professor of Geology, Colorado College 719-389-6790, pmyrow@coloradocollege.edu