

SAMANTHA MORUZZI

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10 Earl Ct.
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EDUCATION

BS **Cornell University**, Earth and Atmospheric Science Expected: May 2020
Concentration in Planetary Sciences
Minor in Italian
GPA: 3.43

HONORS AND AWARDS

Society of Exploration Geophysicists/Earl D. & Reba C. Griffin Memorial Scholarship 2018

American Institute of Professional Geologists Undergraduate Scholarship 2018

Cornell Engineering Learning Initiatives Research Student Grant Summer 2017

Society of Exploration Geophysicists/Landmark Scholarship 2017

National Organization of Italian American Women Scholarship Award 2017

Society of Exploration Geophysicists/Anadarko Scholarship 2017

RESEARCH EXPERIENCE

Cornell University, Ithaca, NY Sept. 2018-Present
Student Research Assistant, Dr. Alexander Hayes

- Analyzing backscatter curves in Cassini SAR data of various terrain types on Titan at varying viewing geometries to determine surface properties and composition of these terrain types.

Cornell University, Ithaca, NY Summer 2018
Student Research Assistant, Dr. Matthew Pritchard

- Acquired and analyzed InSAR data over Ithaca, Lansing and Tully Valley, NY to identify deformation and subsidence signals in these areas. Research in conjunction with CLEAN and Cornell University's Earth Source Heat Project

Cornell University, Ithaca, NY Jan. 2017-May 2018
Student Research Assistant, Dr. Matthew Pritchard

- Created a database of temperature time series for 319 volcanoes in Latin America using thermal images from the NASA/Japan funded ASTER (Advanced Spaceborne Thermal Emission Reflection Radiometer) mission.
- Studied thermal anomalies as precursors to eruptions and comparing the manual detection to the algorithmic detection by JPL created and run AVA (ASTER Volcano Archive)

TEACHING EXPERIENCE

Cornell University, Ithaca NY

Fall 2017, Fall 2018

EAS 1540/1560: Introduction to Oceanography (Teaching Assistant)

- Graded labs, homework and proctored examinations for undergraduate course of approx. 1100 students
- Facilitated weekly laboratory sections.
- Worked with other teaching assistants and professor to develop projects and newsletters to engage students' interest in the course material

PUBLICATIONS

Journal Papers in Review

Reath, K.A., Pritchard, M., Poland, M., et al. "Thermal, deformation, and degassing remote sensing time series (A.D. 2000-2017) at the 47 most active volcanoes in Latin America: Implications for Volcanic Systems," Submitted to: *Journal of Geophysical Research-Solid Earth*.

Reath, K., Pritchard, M., Moruzzi S., Allcott, A., Coppola, D., Pieri, D., "The AVTOD (ASTER Volcanic Thermal Output Database) Latin America Archive," Submitted to: *Journal of Volcanology and Thermal Research*.

PRESENTATIONS AND SEMINARS

Science of Earth Systems Student Association Spring 2018 Symposium

May 2018

Cornell University | Poster Title: "Satellite Detection of Thermal Anomalies at Latin American Volcanoes"
Mediator for Honors Thesis Presentations

Science of Earth Systems Student Association Fall 2017 Symposium

December 2017

Cornell University | Poster Title: "Volcanic Thermal Anomalies Detected by Satellite in Latin America: Precursors to Eruptions?"

Earth and Atmospheric Science Andes Seminar

November 2017

Cornell University, Snee Hall | Seminar Topic: AVTAD: ASTER Volcanic Thermal Anomaly Database for 47 Latin American Volcanoes of Interest
Presented alongside Dr. Kevin Reath

Science of Earth Systems Student Association Spring 2017 Symposium

May 2017

Cornell University | Poster Title: "Volcanic Thermal Anomalies Detected by Satellite: Precursors to Eruptions?"

COMPUTER SKILLS

Programming: Linux, MATLAB

Applications: ENVI, USGS Glovis, NASA Reverb Echo, ASF Vertex Data Portal, Seismic Unix, Oasis
Montage: Geosoft,

The Scientista Foundation

Fall 2016-Present

Cornell University Chapter

- Learn about research opportunities for women in STEM majors.
- Network with professionals in fields of interest.
- Organize leadership summits for middle school and high school girls to engage their interest in STEM

Science of Earth Systems Student Association (SESSA)

Fall 2016-Present

Co-President | Cornell University

- Organize biannual undergraduate research symposiums.
- Coordinate information sessions regarding graduate school and course selections for Science of Earth Systems majors.

Society of Exploration Geophysicists Student Member

June 2016

- Discuss with a mentor from University of Texas at Austin provided by the society through Landmark and Anadarko Scholarship internship and future career opportunities

Hudson Mohawk Professional Geologists Association and NYSCPG Student Member

August 2015-Present | Albany, NY

- Attend meetings and discuss careers and geological research with professional geologists in the Capital District and current undergraduate and graduate students at local college