

Samantha Ouertani

CONTACT INFORMATION	https://www.linkedin.com/in/samantha-ouertani samantha_ouertani@alumni.brown.edu (786) 266-0778
EDUCATION	Brown University, Providence, RI B.S. Geophysics with Honors, May 2022 GPA: 3.7
HONORS AND AWARDS	Brown University Presidential Scholar Carl F. Braun WAVE Fellow Award - 2021 Sarah LaMendola Undergraduate Research Award - 2021 Karen T. Romer Undergraduate Teaching Research Award (UTRA) - 2020
SKILLS	Computing: Python, PyGMT, MATLAB, GrowClust, Pylon Viewer Laboratory: Column chromatography, GC-FID Machine Science Communication: Experience with research writing, Oral presentations, and Collaborative work Languages: English (native), Spanish (native)
RESEARCH	University of Miami Dec 2022 - Present Research Associate II, AOML-NOAA, Physical Oceanography Division <ul style="list-style-type: none">• Developing a NOAA-ERDDAP server to better distribute Global Drifter Center's buoy data publicly• Improving server interface and enhancing user query options• Organizing sea surface temperature and sea level pressure data from ~1300 drifter buoys Caltech Jun 2021 - Aug 2021 WAVE Fellow, SeismoLab, Dr. Zachary E. Ross <ul style="list-style-type: none">• Investigated Ridgecrest 2019 aftershocks from a probabilistic approach and identified corresponding fault planes• Applied Gaussian Mixture model to Ridgecrest 2019 spectra• Implemented geographic clustering with Python and resolved rupture directivity modes• Improved complex fault zone analysis with machine learning Brown University Jun 2020 - May 2022 Undergraduate Assistant Researcher, Seismology Group, Dr. Karen M. Fischer <ul style="list-style-type: none">• Improved understanding of Nicaraguan faulting mechanisms by relocating earthquakes• Processed waveforms with MATLAB and optimized cross-correlation scripts• Collaborated across disciplines and analyzed results from seismological and geodetic approaches• Began project under Brown University's UTRA (Jun 2020 - Aug 2020), continued work for Honors Thesis Brown University Sept 2019 - Jun 2022 Undergraduate Assistant Researcher, Paleolimnology, Dr. James M. Russell

- Inspected warming and drying periods' ties to human evolution and compared results to global paleoclimate records
- Analyzed leaf wax data with spectral analysis methods in MATLAB
- Organized lake sediment samples for n-alkane column chromatography analysis
- Analyzed data from GC-FID Machine (Gas Chromatography - Flame Ionization Detector)

University of Miami Jun 2019 - August 2019
 Undergraduate Assistant Researcher, Ocean Physics, Dr. Brian K. Haus

- Worked with instruments to measure wind velocity and temperature anomalies
- Processed thousands of high speed images through MATLAB

WORK
 (NON-RESEARCH)

Clinician Jun 2022 - Present
 Lindamood-Bell Miami Learning Center

- Delivering spelling and reading comprehension instruction to children ages 5 - 15
- Improving students' reading scores after several weeks of intensive instruction

Undergraduate Teaching Assistant Sept 2021 - Dec 2021
 Brown University

- Supported the success of 50 undergraduates in introductory geology course EEPS 0220: Understanding Earth and Environmental Processes
- Assisted with the course's lab sections and field trips, and associated guiding materials
- Graded homework assignments and lab write-ups proactively, provided constructive feedback

Math and Science Tutor Sept 2017 - Dec 2019
 Independent, Miami, FL

- Prepared high school science and math lessons several times a week (subjects: geometry, algebra, calculus, general chemistry)
- Tailored individual and group tutoring sessions to students' learning styles
- Communicated with parents and organized lessons on a weekly basis

VOLUNTEER

OLEEP Mentor Sept 2019 - May 2022
 Outdoor Leadership and Environmental Education Program, Brown University

- Mentored high school students in navigating coursework and college preparation
- Developed and facilitated weekly climate change and environmental justice workshops
- Implemented engaging learning activities to accessibly communicate science with all students

PRESENTATIONS

Ouertani, S., Z. E. Ross, *Determining Rupture Directivity of 2019 Ridgecrest sequence aftershocks with Gaussian Mixture modeling*, Abstract S023, 2021 Fall AGU Meeting (Abstract)

Ouertani, S., K. M. Fischer, P. C. La Femina, W. Strauch, V. Tenorio, *Faulting and Fore-arc Sliver Transport in the Nicaraguan Subduction Zone*, Abstract T057-08, 2020 Fall AGU Meeting (Oral Presentation)