Jonathon Waian

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Summary

I earned my MS in Geological Sciences from Ohio University in 2021 and am currently earning an ME in Geophysical Engineering with the University of Arizona. My research interests include volcanology, thermochronology, geophysics, tectonics, and geochronology. My current research is investigating the magnetohydrodynamics of active lava flows at high velocities, such as those found in channels and tubes. Numerical investigations suggest the induced magnetic field of the flow is within a measurable range and may offer a new geophysical method of determining lava flow velocity. I am currently seeking Ph.D. opportunities to advance this project, as well as research collaborations or employment opportunities.

Education

University of Arizona -*Master of Engineering in Geophysical Engineering* (expected 2023)
Ohio University- *Master of Science in Geological Sciences* (2021)
University of California Santa Cruz- *Bachelor of Science in Earth Science (*2020)
Santa Barbara City College
Embry-Riddle Aeronautical University

Conference Poster Publications

Waian, Jonathon M., (2021), *Numerical Investigation and Discussion of the Magnetohydrodynamics of Basaltic Lava Flows Through Tubes by First Order Approximations of the Magnetic Reynolds Number and Hartmann Number*; Geological Society of America Abstracts with Programs. Vol. 53, No. 6, doi: 10.1130/abs/2021AM-370517

Waian, Jonathon M., and Bareket-Shavit, Kallee., (2019), *The Effectiveness of Undergraduate Mentorship in Field Geology*; Geological Society of America Abstracts with Programs. Vol. 51, No. 5, ISSN 0016-7592 doi: 10.1130/abs/2019AM-341260

Ostwald, Amanda., **Waian**, Jonathon M., Moreno, Victoria., Emmett-Bailleres., Allison T., Segura, Allison., Zuniga, Eduardo Lee., Garcia, Aimee., Lamborn, Gage Richards., (2019) *Student Mentor Experiences in the Summer REU UTEP-ROCCS*; Geological Society of America Abstracts with Programs. Vol. 51, No. 5, ISSN 0016-7592 doi: 10.1130/abs/2019AM-336210

Waian, J.M., and Ricketts, J.W., (2017), *Apatite (U-Th)/He Thermochronology of Eocene Intrusions Located in the Trans-Pecos Province*, Presented at the Fall 2017 Virtual Poster Showcase, American Geophysical Union, Washington, DC.

Waian, J.M., and Ricketts, J.W., 2017, *Investigating post emplacement cooling histories and tectonic cause of exhumation of igneous intrusions in El Paso, TX using apatite (U-Th)/He data*: Geological Society of America Abstracts with Programs, v. 49, doi:10.1130/abs/2017AM-304880.

Experience

Internships
- Research Opportunity for Community College Students (ROCCS) with the University of Texas-El Paso Summer 2017
- Student Mentor for the ROCCS program Summer 2018

Field Geology
- South Dakota School of Mines Hawaii Winter 2019
  - Three weeks of field mapping and writing reports on volcanology in Hawaii
- UCSC Summer Field Studies Summer 2019
  - Five weeks of field mapping in the Poleta Fold Belt located in Deep Springs Valley, CA
- UCSC Introductory Field Geology Fall 2018
  - Eight days of introductory field mapping throughout the Coast Ranges in California

Undergraduate Teaching Assistant
- University of California Santa Cruz, *Introductory Field Geology* Spring semester 2019
- University of California Santa Cruz, *California Geology* Fall semester 2019

Work
- Scientific Manuscript Editor-Earth Sciences (2021-present)
  - I provide subject-specific editorial services for ESL manuscripts as an independent contractor. I aim to promote global academic communication by offering high-quality scientific editing, copy editing, journal recommendations, and submission cover letter writing.

Software
- MATLAB
- Stereonet 11
- Microsoft Office
- HeFTy
- ANSYS
- ArcGIS
- LabView
- CloudCompare

Academic Affiliations

Association of Earth Science Editors (2022)
International Association of Volcanology and Chemistry of the Earth's Interior (2020-present)
National Association of Geoscience Teachers (2020-present)
American Geophysical Union (2018-present)
Geological Society of America (2017-present)