

# AMANDA SYAMSUL

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## EDUCATION

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- **M.S. in Earth Sciences (Seismology & Modeling)** 2023-2026  
University of California, Santa Cruz, CA — *Advisor: Prof. Emily Brodsky*
- **BSc. in Geophysics with Honors, Minor in Applied Math** (major GPA: 3.82) 2019-2023  
University of Washington, Seattle, WA — *Advisor: Prof. Brad Lipovsky*

## TECHNICAL & COMPUTER SKILLS

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**Technical skills:** Seismic data processing and analysis, Fault surface deformation, Marine geophysics, Technical report writing & data visualization, Slope stability analysis, GPR, LiDAR, Geologic mapping, Site reconnaissance, Hazards assessment, Field data collection and terrain evaluation, GIS (ArcGIS, QGIS)

**Computer skills:** Python, MATLAB, R, Linux shell, ObsPy, Adobe Suite

## RECENT WORK & INTERNSHIP EXPERIENCE

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- **Seismic Hazard Analyst** at Lettis Consultants International Inc. July 2026-present  
Conduct seismic hazard analyses (PSHA/DSHA). Perform site response analyses, including development and evaluation of subsurface profiles and dynamic soil properties. Process and interpret earthquake ground motion records, geotechnical and geophysical investigation data. Perform earthquake time-history analyses. Develop input models and perform interpretation of analytical results for seismic hazard and ground motion studies.
- **Science Communication Internship** at EarthScope Consortium May 2026-present  
Develop geophysics and seismic-related writing and visualizations for outreach-focused science communication to broad audiences and stakeholders.
- **Graduate Researcher & Teaching Assistant** at UC Santa Cruz — Santa Cruz, CA Sept 2023-present  
Develop programming workflows for processing and analyzing large geophysical datasets (seismic, satellite, ocean bottom pressure records) to assess hazards and wave propagation. Model crustal deformation and sea level change in fault zones. Produce technical reports for scientific and non-technical audiences. Instruct undergraduate students in courses on MATLAB, Introductory Geophysics, and Geologic Hazards.
- **Scientific Outreach** at Pacific Northwest Seismic Network — Seattle, WA 2022-2023  
Prepare data visualizations on Earthquake Early Warning for congressional district meetings. Facilitate discussions on preparedness and risk for significant earthquakes in the Pacific Northwest.
- **Matanuska Glacier Internship** at Alaska Outfitters LLC — Glacier View, AK June-Sept 2021  
Conduct fieldwork on glacial terrain, including route assessment, hazard identification, and terrain evaluation. Apply real-time decision-making to ensure safety in dynamic environmental conditions. Perform site observations and communicate geologic features and risks in field settings

## PUBLICATIONS, AWARDS, & OUTREACH

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Syamsul & Lipovsky (2025, In review). Surface Load Induced Earthquakes. *Geophysical Journal International*

Syamsul et al. (2026, In review). Using Ocean Bottom Pressure Measurements of Internal Waves in the S. China Sea to Track Annual Cycle of Stratification. *Geophysical Research Letters*

- Bay Area Geophysical Society's Louise 'Lu' Pellerin Memorial Scholarship 2025
- Douglas Merrill Prize for Excellence in Geological Sciences 2023
- Afton Woolley Crooks & James William Crooks Endowed Scholarship in Geological Sciences 2022
- **Outdoors for All Ski Chaperone** — Snoqualmie, WA 2023-2025  
Chaperone athletes with physical and/or mental disabilities by advocating for their specific needs
- **College of the Environment Student Advisory Council for Dean's Office** 2022-2023  
Provide communication pathways for Dean's Office, with recommendations on budgets, curriculum etc.
- **Rohingyan Education Program** — Kuala Lumpur and Seremban, Malaysia 2018-2019  
Develop syllabus and teach weekly Math, Science, and Arabic classes for Rohingya refugees