

Rasheed Ajala

✉ rajala@ldeo.columbia.edu | 🏠 ajalalab.com

Training

Columbia University

📍 New York, NY, U.S.

POSTDOC IN GEOPHYSICS AND SEISMOLOGY

LAMONT-DOHERTY EARTH OBSERVATORY (LDEO) POSTDOCTORAL FELLOW

📅 Sep. 2022 - Present

NSF EARTH SCIENCES POSTDOCTORAL FELLOW (EAR-PF)

Peer-Reviewed Articles

- ✍️ Kolawole, F. & **Ajala, R.** (2024). Propagating rifts: the roles of crustal damage and ascending mantle fluids, *Solid Earth*, 15(7), 747-762.
<https://doi.org/10.5194/se-15-747-2024>
- ✍️ **Ajala, R.**, Kolawole, F., & Menke, W. (2024). Blind magmatism abets nonvolcanic rifting, *Nature Communications Earth & Environment*, 1–8.
<https://doi.org/10.1038/s43247-024-01244-7>
- ✍️ **Ajala, R.**, Persaud, P., & Juarez, A. (2022). Earth Model Space Exploration in Southern California: Influence of Topography, Geotechnical Layer, and Attenuation on Wavefield Accuracy, *Frontiers in Earth Science*, 1-19.
<https://doi.org/10.3389/feart.2022.964806>
- ✍️ **Ajala, R.** & Persaud, P. (2022). Ground-Motion Evaluation of Hybrid Seismic Velocity Models, *The Seismic Record*, 2(3), 186-196.
<https://doi.org/10.1785/0320220022>
- ✍️ **Ajala, R.** & Persaud, P. (2021). Effect of Merging Multiscale Models on Seismic Wavefield Predictions Near the Southern San Andreas Fault, *Journal of Geophysical Research: Solid Earth*, 126, 1-23.
<https://doi.org/10.1029/2021JB021915>
- ✍️ **Ajala, R.**, Persaud, P., Stock, J. M., Fuis, G. S., Hole, J. A., Goldman, M. R., & Scheirer, D. S. (2019). Three-dimensional Basin and Fault Structure From a Detailed Seismic Velocity Model of Coachella Valley, Southern California. *Journal of Geophysical Research: Solid Earth*, 124, 4728-4750.
<https://doi.org/10.1029/2018JB016260>

Honors

NSF Postdoctoral Research Fellowship	📅 2024 – 2026
SCEC Meeting Best Overall Presentation (Including Students, Postdocs, and Professors)	📅 Fall 2023
Columbia Postdoctoral Excellence Award	📅 Fall 2023
Columbia Postdoctoral Research Symposium Best Poster Award	📅 Spring 2023
Lamont-Doherty Postdoctoral Research Fellowship (24 Years Old)	📅 2022 - 2024
Undergraduate Earth and Atmospheric Sciences Department Banner Bearer (19 Years Old)	📅 May 2017
Mathematics Olympiad (Top 1% in Nigeria)	📅 June 2012

Funding History

NSF EAR-PF Award for 180,000.00 USD : <i>Synthesizing Multiscale Earth Models to Enhance Exploration, Discovery, and Application</i>	📅 Aug. 2024 - Aug. 2026
I (PI) wrote the proposal; Mentors: Folarin Kolawole and Daniel Trugman.	
CRESCENT Award CR2024-01 for 30,991.00 USD : <i>Multi-Resolution and -Scale Synthesis of Cascadia Earth Models</i>	📅 May 2024 - May 2025
I (PI) wrote the proposal; Co-PI: Folarin Kolawole.	
SCEC Award 24043 for 31,464.00 USD : <i>3D full waveform inversion of the Salton Seismic Imaging Project active source dataset</i>	📅 Feb. 2024 - Feb. 2025
I (PI) wrote the proposal; Co-PI: Folarin Kolawole.	
SCEC Award 23178 for 29,555.00 USD : <i>Active-Source Adjoint Tomographic Update of CVM-H 15.1 in Salton Trough</i>	📅 Feb. 2023 - Feb. 2024
PI: Folarin Kolawole; I (Co-PI) wrote the proposal.	
Lamont Research Fellowship for 144,500.00 USD : <i>Nucleation of Incipient Continental Rifts: Insights from Machine Learning and Mantle-to-Crustal Scale Seismology</i>	📅 Sep. 2022 - Jul. 2024
I (PI) wrote the proposal; Mentors: Folarin Kolawole and William (Bill) Menke.	
SCEC Award 21059 for 28,847.00 USD : <i>Updating CVM-S 4.26 in Salton Trough Using Explosion Waveforms</i>	📅 Feb. 2021 - Feb. 2022
PI: Patricia Persaud; I (Ph.D. Student Investigator) wrote the scientific justification of the proposal.	
NSF Supplemental Award for 55,000.00 USD : <i>Seismic Signal Detection, Identification, and Location: An Integrated Machine Learning Approach</i>	📅 Jun. 2021 - Nov. 2021
PI: Patricia Persaud; I (Ph.D. Student Investigator) wrote the scientific justification of the proposal.	
SCEC Award 20023 for 30,030.00 USD : <i>Assimilating SSIP data into a Full 3D Tomography (F3DT) model of the Salton Trough</i>	📅 Feb. 2020 - Feb. 2021
PI: Patricia Persaud; I (Ph.D. Student Investigator) wrote the scientific justification of the proposal.	
SCEC Award 19014 for 30,030.00 USD : <i>Assimilating SSIP data into a Full 3D Tomography (F3DT) model of the Salton Trough</i>	📅 Feb. 2019 - Feb. 2020
PI: Patricia Persaud; I (Ph.D. Student Investigator) wrote the scientific justification of the proposal.	