Curriculum Vitae

March 2022

Junle Jiang

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School of Geosciences, Mewbourne College of Earth and Energy

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University of Oklahoma, Norman, OK 73019, USA

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RESEARCH INTERESTS

I am interested in the dynamic processes in the Earth's crust and strive to understand their mechanisms, predictability, and societal impacts, with the ultimate goals to improve the assessment and mitigation of geo-hazards and safe, sustainable exploration of geo-energy. My current research is focused on microseismicity, large earthquakes, and crustal deformation due to tectonic and human activities over timescales from seconds to centuries, through integrating laboratory-based physical models and geophysical observations, in particular from Global Navigation Satellite System (GNSS) and Interferometric Synthetic Aperture Radar (InSAR).

EDUCATION

Caltech, Pasadena, CA, USA	Geophysics	*Ph.D.*, 2016
Caltech, Pasadena, CA, USA	Computational Science and Engineering	*Ph.D. Minor*, 2014
Caltech, Pasadena, CA, USA	Geophysics	*M.Sc.*, 2011
Peking University, Beijing, China	Physics	*B.Sc.*, 2009

APPOINTMENTS

Assistant Professor, School of Geosciences, University of Oklahoma	2020/08–present
Postdoctoral Associate, Cornell University	2018/06–2020/07
Green Postdoctoral Scholar, Scripps Institution of Oceanography, UC San Diego	2016/02–2018/05
Research and Teaching Assistant, Seismological Laboratory, Caltech	2009/09–2015/12

PHD DISSERTATION

Jiang, J. (2016), Probabilistic Imaging and Dynamic Modeling of Earthquake Source Processes, California Institute of Technology. doi:10.7907/Z9639MQC. (Advisors: M. Simons & N. Lapusta)

REFEREED PUBLICATIONS

1. **Jiang, J.**, Erickson, B., Lambert, V., Ampuero, J.-P., Ando, R., Barbot, S., Cattania, C., Dal Zilio, L., Duan, B., Dunham, E., Gabriel, A-A., Lapusta, N., Li, D., Li, M., Liu, D., Liu, D., Liu, Y., Ozawa, S., Pranger, C., van Dinther, Y., Community-driven code comparisons for three-dimensional dynamic modeling of sequences of earthquakes and aseismic slip (SEAS), *J. Geophys. Res. Solid Earth,* 127, e2021JB023519, doi:10.1029/2021JB023519.
2. **Jiang, J.**, Bock, Y., and Klein, E. (2021). Coevolving early afterslip and aftershock signatures of a San Andreas fault rupture, *Science Advances*, 7, doi:10.1126/sciadv.abc1606. Media Coverage: OU News.
3. **Jiang, J.**, & Lohman, R. B. (2020). Coherence-guided InSAR deformation analysis in the presence of ongoing land surface changes in the Imperial Valley, California. *Remote Sens. Environ.*, 112160, doi:10.1016/j.rse.2020.112160.
4. Erickson, B.*, **Jiang, J.***, Barall, M., Lapusta, N., Dunham, E. M., Harris, R., Abrahams, L., Allison, K., Ampuero, J.-P., Barbot, S., Cattania, C., Elbanna, A., Fialko, Y., Idini, B., Kozdon, J., Lambert, V., Liu, Y., Luo, Y., Ma, X., Segall, P., Shi, P., and Wei, M. (2020). The community code verification exercise for simulating sequences of earthquakes and aseismic slip (SEAS), *Seismo. Res. Lett., 91*(2A), 874–890, doi:10/10.1785/0220190248. (*equal contributions)

5. Tymofyeyeva, E., Fialko, Y., **Jiang, J.**, Xu, X., Sandwell, D., Bilham, R., Rockwell, T. K., Blanton, C., Burkett, F., Gontz, A., and Moafipoor, S. (2019). Slow slip event on the southern San Andreas fault triggered by the 2017 Mw8.2 Chiapas (Mexico) earthquake. *J. Geophys. Res. Solid Earth*, 124, doi:10.1029/2018JB016765. Media Coverage: EOS Research Spotlight.
6. Xu, X., Ward, L., **Jiang, J.**, Smith-Konter, B., Tymofyeyeva, E., Lindsey, E., Sylvester, A. G., and Sandwell, D. T. (2018). Surface creep rate of the Southern San Andreas Fault modulated by stress perturbations from nearby large events, *Geophys. Res. Lett., 45*, 10259–10268, doi:10.1029/2018GL080137.
7. Gombert, B., Duputel, Z., Jolivet, R., Simons, M., **Jiang, J.**, Liang, C., Fielding, E. J., and Rivera, L. (2018). Strain budget of the Ecuador–Colombia subduction zone: A stochastic view, *Earth Planet. Sci. Lett.*, *498*, 288–299, doi:10.1016/j.epsl.2018.06.046.
8. Fan, W., Bassett, D., **Jiang, J.**, Shearer, P. M., and Ji, C. (2017). Rupture evolution of the 2006 Java tsunami earthquake and the possible role of splay faults, *Tectonophysics*, *721*, 143–150, doi:10.1016/j.tecto.2017.10.003.
9. Michel, S., Avouac, J.-P., Lapusta, N., and **Jiang, J.** (2017). Pulse-like partial ruptures and high-frequency radiation at creeping-locked transition during megathrust earthquakes, *Geophys. Res. Lett.*, *44*, 8345–8351, doi:10.1002/2017GL074725.
10. **Jiang, J.** and Lapusta, N. (2017). Connecting depth limits of interseismic locking, microseismicity, and large earthquakes in models of long-term fault slip, *J. Geophys. Res. Solid Earth, 122*, 6491–6523, doi:10.1002/2017JB014030.
11. Yue, H., Simons, M., Duputel, Z., **Jiang, J.**, Fielding, E., Liang, C., Owen, S., Moore, A., Riel, B., Ampuero, J. P., and Samsonov, S. V. (2016). Depth varying rupture properties during the 2015 Mw 7.8 Gorkha (Nepal) earthquake, *Tectonophysics, 714–715*, 44-54, doi:10.1016/j.tecto.2016.07.005.
12. **Jiang, J.** and Simons, M. (2016). Probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki Earthquake, *J. Geophys. Res. Solid Earth*, *121*, 9050–9076, doi:10.1002/2016JB013760. Media Coverage: EOS Research Spotlight.
13. **Jiang, J.** and Fialko, Y. (2016). Reconciling seismicity and geodetic locking depths on the Anza section of the San Jacinto fault, *Geophys. Res. Lett.*, *43*, 10663–10671, doi:10.1002/2016GL071113.
14. Bletery, Q., Sladen, A., **Jiang, J.**, and Simons, M. (2016). A Bayesian source model for the 2004 great Sumatra-Andaman earthquake, *J. Geophys. Res. Solid Earth*, *121*, 5116–5135, doi:10.1002/2016JB012911.
15. **Jiang, J.** and Lapusta, N. (2016). Deeper penetration of large earthquakes on seismically quiescent faults, *Science*, *352*(6291), 1293–1297, doi:10.1126/science.aaf1496. Media Coverage: New Yorker, Phys.org.
16. Duputel, Z., **Jiang, J.**, Jolivet, R., Simons, M., Rivera, L., Ampuero, J.-P., Riel, B., Owen, S. E., Moore, A. W., Samsonov, S. V., Culaciati, F. O., and Minson, S. E. (2015). The Iquique earthquake sequence of April 2014: Bayesian modeling accounting for prediction uncertainty, *Geophys. Res. Lett.*, *42*, 7949–7957, doi:10.1002/2015GL065402.
17. Bletery, Q., Sladen, A., Delouis, B., Vallée, M., Nocquet, J.-M., Rolland, L., and **Jiang, J.** (2014). A detailed source model for the M_w 9.0 Tohoku-Oki earthquake reconciling geodesy, seismology, and tsunami records, *J. Geophys. Res. Solid Earth*, *119*, 7636–7653, doi:10.1002/2014JB011261.
18. Minson, S. E., Simons, M., Beck, J. L., Ortega, F., **Jiang, J.**, Owen, S. E., Moore, A. W., Inbal, A., and Sladen, A.(2014). Bayesian inversion for finite fault earthquake source models - II: the 2011 great Tohoku-oki, Japan earthquake, *Geophys. J. Int.*, *198*(2), 922–940. doi:10.1093/gji/ggu170.
19. Wei, S., Graves, R., Helmberger, D. V., Avouac, J.-P., and **Jiang, J.** (2012). Sources of shaking and flooding during the Tohoku-Oki earthquake: A mixture of rupture styles, *Earth Planet. Sci. Lett.*, *333-334*(C), 91–100, doi:10.1016/j.epsl.2012.04.006.
20. Simons, M., Minson, S. E., Sladen, A., Ortega, F., **Jiang, J.**, Owen, S. E., Meng, L., Ampuero, J. P., Wei, S., Chu, R., Helmberger, D. V., Kanamori, H., Hetland, E., Moore, A. W., and Webb, F. H. (2011). The 2011 magnitude 9.0 Tohoku-oki earthquake: Mosaicking the megathrust from seconds to centuries, *Science*, *332*(6036), 1421–1425, doi:10.1126/science.1206731.

DATASETS

1. **Jiang, J.**, Erickson, B. et al. (2021). Simulation Data for "Community-Driven Code Comparisons for Three-Dimensional Dynamic Modeling of Sequences of Earthquakes and Aseismic Slip (SEAS)" [Data set]. In *Journal of Geophysical Research*. Zenodo. https://doi.org/10.5281/zenodo.6299674.
2. Materna, K., Barbour, A., **Jiang, J.**, and Eneva (2022), Geodetic displacement data near North Brawley Geothermal Field, 2009-2019. Zenodo. https://doi.org/10.5281/zenodo.5949377.
3. **Jiang, J.**, Bock, Y., and Klein, E. (2021). Data for "Coevolving early afterslip and aftershock signatures of a San Andreas fault rupture" [Data set]. In *Science Advances*. Zenodo. https://doi.org/10.5281/zenodo.4278477.
4. **Jiang, J.**, and Lohman, R. (2020). Data for "Coherence-guided InSAR deformation analysis in the presence of ongoing land surface change in the Imperial Valley, California" [Data set]. In *Remote Sensing of Environment*. Zenodo. https://doi.org/10.5281/zenodo.3911193.

WHITE PAPERS

Lapusta, N., et al., 2019. Modeling Earthquake Source Processes: from Tectonics to Dynamic Rupture, Report to the National Science Foundation. http://seismolab.caltech.edu/pdf/MESP_White_Paper_Main_Text_8_March_2019.pdf

PUBLICATIONS IN PROGRESS

1. Materna, K., Barbour, A., **Jiang, J.**, and Eneva, M., Detection of aseismic slip and poroelastic reservoir deformation at the North Brawley Geothermal Field from 2009-2019, in review at *JGR*.
2. Erickson, B. A., **Jiang, J.**, Lambert, V. R., Abdelmeguid, M., Almquist, M., Ampuero, J., Ando, R., Barbot, S. D., Cattania, C., Chen, A., Dal Zilio, L., Dunham, E. M., Elbanna, A. E., Gabriel, A., Harvey, T., Huang, Y., Kaneko, Y., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., & Yang, Y., Incorporating Full Elastodynamics and Dipping Fault Geometries in Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS), in preparation for *BSSA*.
3. **Jiang, J.** Simons, M., Liang, C., and Fattahi, H., Bayesian inference of seismic and aseismic megathrust processes in Central Chile I: Quantifying uncertainty, resolution, and information content in joint analyses of InSAR, GPS, and tsunami data, in preparation for *JGR*.
4. **Jiang, J.** Simons, M. et al., Bayesian inference of seismic and aseismic megathrust processes in Central Chile II: Connecting three-dimensional subduction zone structure and spatiotemporal source evolution, in preparation for *JGR*.
5. **Jiang, J.** and Lapusta, N., Influence of depth-dependent fault permeability and shear zone on earthquake scaling and sequence dynamics, in preparation for *EPSL*.
6. **Jiang, J.** and Lapusta, N., Long-term properties of dynamic ruptures and stress redistribution on faults with heterogeneous compressive strength, in preparation for *GJI*.

INVITED TALK

Department of Geosciences Seminar, University of Montana	2022/01
Earthquake Physics Seminar, University of Southern California	2021/11
Berkeley Seismology Laboratory Seminar, University of California, Berkeley	2021/10
GeoSeminar, Department of Geosciences, University of Tulsa	2021/09
Earthquake Science Center Seminar, United States Geological Survey	2021/07
School of Geosciences, University of Oklahoma	2020/03
Andes Seminar, Department of Earth and Atmospheric Sciences, Cornell University	2019/09
Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology	2019/03

Andes Seminar, Department of Earth and Atmospheric Sciences, Cornell University	2018/09
Department of Geology and Geophysics, Woods Hole Oceanographic Institution	2018/03
Department of Earth, Planetary, and Space Sciences, University of California Los Angeles	2017/03
Geophysics Seminar, IGPP, Scripps Institution of Oceanography, University of California, San Diego	2016/03

SELECTED CONFERENCE PRESENTATIONS

1. **Jiang, J.**, Erickson, B., Lambert, V., Abdelmeguid, M., Almquist, M., Ampuero, J.-P., Ando, R. Barbot, S., Cattania, C., Chen, A., Dal Zilio, L., Duan, B., Dunham, E. M., Elbanna, A. E., Gabriel, A.-A., Harvey, T., Huang, Y., Kaneko, Y., Kozdon, J. E., Lapusta, N., Li, D., Li, M., Liang, C., Liu, D., Liu, Y., Ozawa, S., Pranger, C., Segall, P., Sun, Y., Thakur, P., Uphoff, C., van Dinther, Y., Yang, Y. (2021, December). Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): 3D Effects, Fully Dynamic Ruptures, and Dipping Fault Geometries. In *AGU Fall Meeting 2021*. AGU. (Poster presentation)
2. Eiden, E., Devlin, K., Burgi, P., MacQueen, P., Headlam, C., Brill, K.A., Carrillo, C.M., Hamilton, D.S.S., **Jiang., J.**, Barcheck, G. and Hitchcock, P., 2020, December. The IDEEAS Working Group at Cornell University: A New Framework of Collective Leadership for Promoting Justice, Equity, Diversity, and Inclusion in the Geosciences. In *AGU Fall Meeting Abstracts* (Vol. 2020, pp. ED015-0008) (Poster Presentation). Preprint: doi:10.1002/essoar.10505326.1.
3. **Jiang., J.**, and Lohman, R. B., Characterizing tectonic and anthropogenic ground deformation history in the Imperial Valley, California, using Sentinel-1 InSAR time series, AGU Fall Meeting, San Francisco, CA, Dec. 2019 (Oral Presentation).
4. **Jiang., J.** (2019), Perspectives from the SCEC Sequences of Earthquakes and Aseismic Slip (SEAS) Project, SCEC workshop on "How Physics-Based Earthquake Simulators Might Help Improve Earthquake Forecasts," June 18, 2019 (Invited Oral Presentation).
5. **Jiang., J.**, Bock, Y., and E. Klein, Imaging slip evolution on the San Andreas fault due to the 2004 Parkfield earthquake, AGU Fall Meeting, Washington D.C., Dec. 2018 (Oral Presentation).
6. **Jiang., J.**, and Erickson, B. A. Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS). SCEC Annual Meeting, Sept. 2018 (Invited Oral Presentation).
7. **Jiang., J.** and Fialko, Y., Mechanisms of unsteady shallow creep on major crustal faults, AGU Fall Meeting, New Orleans, LA, Dec. 2017 (Oral Presentation).
8. **Jiang., J.** and Simons, M., Multiscale probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki earthquake, SSA Fall Meeting, Denver, CO, Apr. 2017 (Invited Oral Presentation).
9. Kirschvink, J. and **Jiang, J.**, Potential Seismic and Tsunami Hazard from the Palau Trench, as viewed from molluscan grazing notches in uplifted coral atolls, GSA Annual Meeting, Oct. 2014 (Oral Presentation).
10. **Jiang., J.**, Lapusta, N. and Noda, H., Re-evaluating the seismogenic potential of creeping fault regions: implications from models with rate-and-state friction and enhanced coseismic weakening, AGU Fall Meeting, San Francisco, CA, USA, Dec. 2013 (Invited Oral Presentation).

FUNDED RESEARCH AND WORKSHOPS

Current & Past Research Grants

PI, "Distinguishing between tectonic and anthropogenic processes in the Salton Sea Geothermal Field," Southern California Earthquake Center (SCEC), $27K 2020/02–2022/01

PI, "Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS)," Southern California Earthquake Center (SCEC), $45K/$50K/$56K/56K in each year 2018/02–2022/01

Co-PI, "Mechanisms of unsteady shallow creep on major crustal faults," Southern California Earthquake Center (SCEC), $28K 2018/02–2019/01

Co-PI, "Microseismicity, geodetic coupling, and earthquake variability on heterogeneous faults: A case study of the Anza section of the San Jacinto Fault," SCEC, $28K 2017/02–2018/01

PI, "Integrated Simulation of Dynamic Earthquakes and Crustal Deformation," Extreme Science and Engineering Discovery Environment (XSEDE), 120K computing units 2017/09–2021/06

Co-PI, "Reconciling seismic and geodetic locking depths on the Anza segment of the San Jacinto Fault." SCEC, $28K 2016/02–2017/01

Pending Research Grants

Co-PI, "Monitoring Hillslope Dynamics Using SAR Time Series and Machine Learning," National Aeronautics and Space Administration (NASA), $280K 2022/01–2024/12

PI, "Numerical modeling of dynamic fracture and deformation in dissimilar fault rocks," American Chemical Society Petroleum Research Fund, $156K 2022/09–2024/08

PI, "Geodetic imaging of earthquakes, fault creep, deformation, and coastal changes at the southern Salton Sea over two decades," SCEC, $28K 2022/02–2023/01

PI, "Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS)," SCEC, $56K 2022/02–2023/01

PI, "Constraining rupture and relaxation dynamics of crustal fault roots with geodetic and microseismic observations," National Science Foundation (NSF) Geophysics Program, $306K 2022/07–2025/06

Co-PI, "Building community in the Geosciences by focusing on undergraduate research for transfer students," NSF Cultural Transformation in the Geoscience Community (CTGC), $360K 2023–2026

Collaborator, "Track I - Center Catalyst: Geohazards Away from Plate Boundaries (GAPS)," NSF Centers for Innovation and Community Engagement in Solid Earth Geohazards 2023–

Workshop Grants

PI (w/ B. Erickson), "Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Fluids, 3D modeling, and Future Directions", SCEC, $12K. Website. 2021/11/02

PI (w/ B. Erickson), "Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Free-Surface effects in 2D/3D models", SCEC, $12K. Website. 2020/10/30

PI (w/ B. Erickson), "Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Full Dynamics and 3D Effects", SCEC, $12K. Website. 2020/01/09

PI (w/ B. Erickson), "Workshop for Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS) — Exploring Complexity and Resolution", SCEC, $12K. Website. 2018/11/29

PI (w/ R. Harris, B. Erickson), "A Joint Workshop: Rupture Dynamics Code Validation and Comparing Simulations of Earthquake Sequences and Aseismic Slip", SCEC, $18.5K. Website. 2018/04/23

HONORS AND AWARDS

Green Postdoctoral Fellowship, IGPP, SIO, UCSD 2016–2018

Graduate Student Office Leadership Award, Caltech 2016

Demetriades-Tsafka-Kokkalis Thesis Prize in Seismo-Engineering, Prediction, and Protection, Caltech 2016

Chinese Government Award for Outstanding Self-Financed Students Abroad 2015

Outstanding Student Paper Award, Tectonophysics Section, American Geophysical Union 2015

Honor for Excellent Graduate, Peking University 2009

Petro China Scholarship, Peking University 2007

Dean's List Award for Academic Excellence, Hong Kong University of Science and Technology 2007

Cannon Scholarship, Peking University 2006

TEACHING EXPERIENCE

Instructor, University of Oklahoma

GPHY5413 Global Geophysics	Fall 2022
GPHY4553 Introduction to Seismology	Spring 2022
GPHY5970 Geophysical Journal Seminar	Fall 2021
GPHY6970 Machine Learning in Geosciences (w/ H. Bedle & M. Pranter)	Fall 2021
GPHY5970 Remote Sensing for Crustal Geophysics	Fall 2021
GPHY5920 Computational Geophysics	Spring 2021
GPHY3440 Mentored Research Experience	Spring 2021
GEOL1114 Physical Geology for Scientists and Engineers	Fall 2020/Spring 2022

Guest Lecturer, Cornell University

EAS2550 Satellite-Based Remote Sensing — Rowena Lohman	Spring 2019 & 2020
EAS7800 Earthquake Record Reading — Geoffrey Abers	Spring 2019
"Teaching & Learning in the Diverse Classroom" Course	Summer 2020

Guest Lecturer, Scripps Institution of Oceanography

SIOG237 Space Geodesy — Yuri Fialko & David Sandwell	Spring 2017 & 2018

Graduate Teaching Assistant, California Institute of Technology

Ge11d/102 Introduction to Geophysics — Robert Clayton & Mike Gurnis	Spring 2014
Ge263 Computational Geophysics — Jean-Paul Ampuero, Robert Clayton & Mike Gurnis	Fall 2012
Ge161 Plate Tectonics — Joann Stock	Fall 2011
Ae/ME/Ge266 Dynamic Rupture and Frictional Faulting — Nadia Lapusta	Spring 2011

STUDENT ADVISING/MENTORING

Thesis/Dissertation/Research Advisor

Segun Steven Bodunde (PhD, 2021/08–present); Haoyu Li (MS, 2021/08–present); Ganiyat Shodunke (PhD, 2021/01–present); Alex Arroyo (2nd project PhD, 2022/01–present)

Thesis/Dissertation Committee Member

Rachel Neher (PhD, 2022/02–present); Jiewen Zhang (PhD, 2020/10–2021/06)

Research Mentor

Gillian Quiros (UCSD Regents Scholar, 2017/09–2018/05); Xander Zheng (Caltech SURF, Summer 2012); Patrick Ferchaud (École Polytechnique, Summer 2011)

FIELD EXPERIENCE

Campaign GPS survey for the San Jacinto fault, Anza, CA, PI: Y. Fialko, UCSD/SIO	Sept. 2016/2017/2018
Rock sample collection and structure mapping of rock islands, Palau, PI: J. Kirschvink, Caltech	Mar. 2017
Seismic deployment at Anza, California, PI: F. Vernon, UCSD/SIO	Apr. 2016
Campaign GPS survey across central Taiwan, PI: S.-B. Yu, Academia Sinica	Dec. 2011
Seismic survey, Salton Seismic Imaging Project (SSIP), PI: J. Stock, Caltech	Mar. 2011

PROFESSIONAL SERVICE

University of Oklahoma (OU)/Mewbourne College of Earth and Energy (MCEE)/School of Geosciences(SOG)

Member, MCEE Diversity, Equity, Inclusion (DEI) Council 2021–present
Member, OU Data Institute for Societal Challenges (DISC) 2021–present
Member, OU Reflection Seismology Centennial Committee 2021–present
Member, SOG Student Awards Committee 2021–present
Member, SOG Computer Lab 1010 Committee 2022–present
Member, SOG Teaching Evaluation Committee 2021–present
Member, SOG Graduate Admission & Affairs Committee 2020–present
Member, SOG Computing Committee 2020–present
Organizer, SOG Virtual Open House for Prospective Graduate Students Fall 2021
Member and DEI Advocate, SOG Environmental Geophysics Search Committee Spring 2021
Member, SOG Petroleum Geosciences Vision Committee Fall 2020
Editor, SOG Application to AGU Bridge Program Partnership Fall 2020

Cornell University, Department of Earth and Atmospheric Sciences

Founding Member, Inclusion, Diversity, and Equity in Earth and Atmospheric Sciences (IDEEAS) 2019–2020
Awardee, Postdoctoral Leadership Program, Cornell University 2018–2019

Professional and Synergistic Activities

Reviewer for proposals: NSF (ad hoc & panel), DFG (Deutsche Forschungsgemeinschaft; ad hoc), NASA (panel), and USGS (panel).

Reviewer for journals: Geophysical Research Letters (1), Journal of Geophysical Research - Solid Earth (14), Geophysical Journal International (6), Earth and Planetary Science Letters (1), Bulletin of the Seismological Society of America (1), Seismological Research Letters (2), Earth Planets and Space (2), Earth and Space Science (1), Pure and Applied Geophysics (8), Tectonophysics (2), Remote Sensing (22), Geosciences (2), Energies (8), Sensors (3), Earthquake Science (1), Applied Sciences (5), etc.

Chair, "State-of-the-Art Observations and Modeling of Earthquake Source Processes" Oral Sessions at AGU Annual Fall Meeting, New Orleans, LO Dec. 2021

Co-Leader, Community Code Verification Initiative for Numerical Simulations of SEAS (Sequences of Earthquakes and Aseismic Slip), Southern California Earthquake Center (SCEC) 2017–present

Institutional representative, Southern California Earthquake Center (SCEC) 2022–present
Institutional representative, Computational Infrastructure of Geodynamics (CIG) 2022–present
Institutional representative, UNAVCO WInSAR 2021–present
Liaison/Judge, Outstanding Student Paper Award (OSPA) of AGU Annual Meeting 2017–2021
Organizer, Geophysics Seminar, IGPP/SIO/UCSD 2016–2018
Organizer, Dix Seismological Laboratory Seminar, Caltech 2011–2012
Event Organizer and Speaker, International Student Programs & Center for Diversity, Caltech 2011–2015
Member, Board of Directors, Graduate Student Council, Caltech 2011–2014

- Option Representative for Geophysics (2011–2013); Under-Represented Student Advocate (2011–2013); Treasurer (2012–2013); Director at Large (2013–2014)

Executive Committee, Chinese Students and Scholars Association, Caltech 2010–2012

- Director for Sports and Outdoor Activities (2010–2011); President (2011–2012)

EDUCATION OUTREACH

Seminar speaker, Science Museum Oklahoma, Oklahoma City, OK	2021
Seminar speaker, Birch Aquarium, Scripps Institution of Oceanography, UCSD	2016–2017
Tour leader for K-12 students, Tectonic Observatory & Seismological Laboratory, Caltech	2010–2015
Invited speaker, Huntington Middle School, San Marino, CA	2011–2012
Teaching assistant and speaker, Blair High School, Pasadena, CA	2010–2011

PROFESSIONAL SOCIETY MEMBERSHIP

Southern California Earthquake Center (SCEC)	2009–present
American Geophysical Union (AGU)	2009–present
Seismological Society of America (SSA)	2012–present
American Association for the Advancement of Science (AAAS)	2012–present
Society of Exploration Geophysics (SEG)	2020–present
Geothermal Research Council (GRC)	2020–present
National Association of Geoscience Teachers (NAGT)	2020–present
Asian Americans and Pacific Islanders in Geosciences (AAPIiG)	2020–present
National Organization of Gay and Lesbian Scientists and Technical Professionals (NOGLSTP)	2021–present