Curriculum Vitae

November 2021 Junle Jiang

School of Geosciences, Mewbourne College of Earth and Energy University of Oklahoma, Norman, OK 73019, USA

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Webpage: https://jjle.github.io

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 | <i>Ph.D.</i> , 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 THESIS

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., Y. Bock, and E. Klein (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.
- 2. 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.
- 3. Erickson, B.*, J. Jiang*, M. Barall, N. Lapusta, E. M. Dunham, R. Harris, L. Abrahams, K. Allison, J.-P. Ampuero, S. Barbot, C. Cattania, A. Elbanna, Y. Fialko, B. Idini, J. Kozdon, V. Lambert, Y. Liu, Y. Luo, X. Ma, P. Segall, P. Shi, and M. Wei, The community code verification exercise for simulating sequences of earthquakes and aseismic slip (SEAS), Seismo. Res. Lett. (*equal contributions). doi:10/10.1785/0220190248.
- 4. Tymofyeyeva, E., Fialko, Y., Jiang, J., Xu, X., Sandwell, D., Bilham, R., et al (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.
- 5. Xu, X., L. Ward, J. Jiang, B. Smith-Konter, E. Tymofyeyeva, E. Lindsey, A. G. Sylvester, and D. T. Sandwell (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.
- 6. Gombert, B., Z. Duputel, R. Jolivet, M. Simons, J. Jiang, C. Liang, E. J. Fielding, and L. Rivera (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.
- 7. Fan, W., D. Bassett, J. Jiang, P. M. Shearer, and C. Ji (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.
- 8. Michel, S., J.-P. Avouac, N. Lapusta, and J. Jiang (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.
- 9. <u>Jiang, J.</u> and N. Lapusta (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.
- 10. Yue, H., M. Simons, Z. Duputel, <u>J. Jiang</u>, E. Fielding, C. Liang, S. Owen, A. Moore, B. Riel, J. P. Ampuero and S.V. Samsonov (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.
- 11. <u>Jiang, J.</u> and M. Simons (2016), Probabilistic imaging of tsunamigenic seafloor deformation during the 2011 Tohoku-oki Earthquake, *J. Geophys. Res. Solid Earth*, 121, 9050–9076, <u>doi:10.1002/2016JB013760</u>. Media Coverage: <u>EOS Research Spotlight</u>.
- 12. <u>Jiang, J.</u> and Y. Fialko (2016), Reconciling seismicity and geodetic locking depths on the Anza section of the San Jacinto fault, *Geophys. Res. Lett.*, 43, 10663–10671, <u>doi:10.1002/2016GL071113</u>.
- 13. Bletery, Q., A. Sladen, J. Jiang, and M. Simons (2016), A Bayesian source model for the 2004 great Sumatra-Andaman earthquake, J. Geophys. Res. Solid Earth, 121, 5116–5135, doi:10.1002/2016JB012911.
- 14. <u>Jiang, J.</u> and N. Lapusta (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.
- 15. Duputel, Z., J. Jiang, R. Jolivet, M. Simons, L. Rivera, J.-P. Ampuero, B. Riel, S. E. Owen, A. W. Moore, S. V. Samsonov, F. O. Culaciati, and S. E. Minson (2015), The Iquique earthquake sequence of April 2014: Bayesian modeling accounting for prediction uncertainty, *Geophys. Res. Lett.*, 42, 7949–7957, doi:10.1002/2015GL065402.
- Bletery, Q., A. Sladen, B. Delouis, M. Vallée, J.-M. Nocquet, L. Rolland, and J. Jiang (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.
- 17. Minson, S. E., M. Simons, J. L. Beck, F. Ortega, **J. Jiang**, S. E. Owen, A. W. Moore, A. Inbal, and A. Sladen (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.
- 18. Wei, S., R. Graves, D. V. Helmberger, J.-P. Avouac, and <u>J. Jiang</u> (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.
- 19. Simons, M., S. E. Minson, A. Sladen, F. Ortega, J. Jiang, S. E. Owen, L. Meng, J. P. Ampuero, S. Wei, R. Chu, D. V. Helmberger, H. Kanamori, E. Hetland, A. W. Moore, and F. H. Webb (2011), The 2011 magnitude 9.0 Tohokuoki earthquake: Mosaicking the megathrust from seconds to centuries, *Science*, 332(6036), 1421–1425, doi:10.1126/science.1206731.

PUBLICATIONS IN REVISION/REVIEW/PREPARATION

- 1. Materna, K., A. Barbour, **J. Jiang**, and M. Eneva, Detection of aseismic slip and poroelastic reservoir deformation at the North Brawley Geothermal Field from 2009-2019, under review at JGR.
- 2. <u>Jiang., J.</u>, B. Erickson, V. Lambert, J.-P. Ampuero, R. Ando, S. Barbot, C. Cattania, L. Dal Zilio, B. Duan, E. Dunham, A-A. Gabriel, N. Lapusta, D. Li, M. Li, D. Liu, D. Liu, Y. Liu, S. Ozawa, C. Pranger, Y. van Dinther,

- Community-driven code comparisons for three-dimensional dynamic modeling of sequences of earthquakes and aseismic slip (SEAS), under review at JGR. Preprint: doi:10.1002/essoar.10508582.1.
- 3. Erickson, B. A., Jiang, J., 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., Lambert, V. R., 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., Community Code Verification Exercises for Simulations of Earthquake Sequences and Aseismic Slip (SEAS): Dynamic Effects and Dipping Fault Geometries, in preparation for SRL.
- 4. **Jiang, J.** and N. Lapusta, Persistent earthquake rupture characteristics and stress redistribution on faults with heterogeneous strength, in preparation for JGR.
- 5. **Jiang, J.** and N. Lapusta, Influence of depth-dependent fault permeability and shear zone width on earthquake size-length scaling and sequence dynamics, in preparation for EPSL.
- 6. <u>Jiang, J.</u> Simons, M., and H. Fattahi, Multiscale imaging of seismic and aseismic processes on subduction zone megathrusts: Application to the 2010 Maule, Chile, earthquake, in prep.
- 7. **Jiang, J.** and Y. Fialko, Mechanisms of slow slip and seismic potential of shallow crustal faults, in prep.
- 8. **Jiang, J.**, F. Hofmann, and J. L. Kirschvink, Emergence of molluscan grazing notches in uplifted coral atolls at Palau: Potential paleoseismic or paleoclimatic markers? in prep.

INVITED TALK

| Earthquake Physics Seminar, University of Southern California | 2021/11 |
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| Berkeley Seismology Laboratory, UC Berkeley | 2021/10 |
| Department of Geosciences, University of Tulsa | 2021/09 |
| Earthquake Science Center Seminar, USGS | 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. <u>Jiang., J.</u>, Bock, Y., and E. Klein, Dynamics of early afterslip-aftershock coevolution following the 2004 Parkfield earthquake, SSA Annual Meeting, Apr. 2021 (Oral Presentation).
- Eiden, E., Devlin, K., Burgi, P., MacQueen, P., Headlam, C., Brill, K.A., Carrillo, C.M., Hamilton, D.S.S., <u>Jiang.</u>, <u>J.</u>, 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).
- 3. <u>Jiang., J.</u>, 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. <u>Jiang., J.</u> (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. <u>Jiang., J.</u>, 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. <u>Jiang., J.</u> and Y. Fialko, Mechanisms of unsteady shallow creep on major crustal faults, AGU Fall Meeting, New Orleans, LA, Dec. 2017 (Oral Presentation).
- 8. <u>Jiang., J.</u> and M. Simons, 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 **J. Jiang**, 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. <u>Jiang., J.</u>, Lapusta, N. and H. Noda, 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**, "Integrated Simulation of Dynamic Earthquakes and Crustal Deformation," Extreme Science and Engineering Discovery Environment (XSEDE), **120K computing units** 2017/09–2021/06
- PI (w/ B. Erickson), "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 (PI: Y. Fialko), "Mechanisms of unsteady shallow creep on major crustal faults," Southern California Earthquake Center (SCEC), \$28K 2018/02–2019/01
- Co-PI (PI: Y. Fialko), "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
- **Co-PI** (PI: Y. Fialko), "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** (PI: N. Regmi), "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, \$110K
 2022/09–2024/08
- PI, "Seismic potential and early postseismic dynamics of deep fault zones in California," National Science Foundation (NSF) Geophysics Program, \$300K 2022/05–2025/04
- PI, "Geodetic imaging of decadal activities of earthquakes, fault creep, and coastal changes at the southern Salton Sea," SCEC, \$27K 2022/02–2023/01
- PI (w/ B. Erickson, V. Lambert), "Advancing Simulations of Sequences of Earthquakes and Aseismic Slip (SEAS)," SCEC, \$56K 2022/02–2023/01

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, workshop 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, workshop 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, workshop 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, workshop website. 2018/11/29

| PI (w/ R. Harris, B. Erickson), "A Joint Workshop: Rupture Dynamics Code Validation and Comparin | ng Simulations |
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| of Earthquake Sequences and Aseismic Slip", SCEC, \$18.5K, workshop 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 | |
| GPHY2013 Frontiers of Geophysics | Spring 2022 |
| GPHY4553 Introduction to Seismology | Spring 2022 |
| GPHY5970 Geophysical Journal Seminar | Fall 2021 |
| GPHY6970 Machine Learning in Geosciences (w/ H. Bedle & M. Pranter; 15 students) | Fall 2021 |
| GPHY5970 Remote Sensing for Crustal Geophysics (8 students) (new course) | Fall 2021 |
| GPHY5920 Computational Geophysics (5 students) (new course) | Spring 2021 |
| GPHY3440 Mentored Research Experience (1 student) | Spring 2021 |
| GEOL1114 Physical Geology for Scientists and Engineers (37 students) | 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 Advisor | |
| Segun Steven Bodunde (OU Ph.D. student): Modeling transient deformation, fluids & seismici | ity 2021/08-present |
| Haoyu Li (OU M.S. student): Imaging post-rupture fault zone properties | 2021/08-present |
| Ganiyat Shodunke (OU Ph.D. student): Geothermal reservoir structure and deformation | 2021/01–present |
| Thesis Committee Member | 1 |
| | 2020/10 2021 |

2020/10-2021/06

Jiewen Zhang (OU Ph.D. student)

Research Mentor

| Gillian Quiros (UCSD Regents Scholar): Modeling nonlinear dynamical systems | 2017/09-2018/05 |
|---|-----------------|
| Xander Zheng (Caltech SURF student) (w/ M. Simons): InSAR analysis of LA basin aquifers | Summer 2012 |
| Patrick Ferchaud (École Polytechnique exchange student)(w/ N. Lapusta): BEM modeling | 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: SB. Yu, Academia Sinica | Dec. 2011 |
| Seismic survey, Salton Seismic Imaging Project (SSIP), PI: J. Stock, Caltech | Mar. 2011 |

PROFESSIONAL SERVICE

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 (12), 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), Engineering Computation (1), Applied Sciences (5), etc.

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

| Member, OU Data Institute for Societal Challenges (DISC) | 2021-present |
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| Member, OU Reflection Seismology Centennial Committee | 2021-present |
| Member, MCEE Diversity, Equity, Inclusion (DEI) Council | 2021-present |
| Member, SOG Student Awards Committee | 2021-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 |
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| Awardee, Postdoctoral Leadership Program, Cornell University | 2018-2019 |

Professional and Synergistic Activities

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|---|----------------|
| Co-Leader, Community Code Verification Initiative for Numerical Simulations of SEAS (Sequences of | of Earthquakes |
| and Aseismic Slip), Southern California Earthquake Center (SCEC) | 2017-present |
| Institutional representative, UNAVCO WInSAR | 2021-present |
| Liaison/Judge, Outstanding Student Paper Award (OSPA) of AGU Annual Meeting | 2017-2020 |
| 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 2020-present Society of Exploration Geophysics (SEG) Geothermal Research Council (GRC) 2020-present National Association of Geoscience Teachers (NAGT) 2020-present Asian Americans and Pacific Islanders in Geosciences (AAPIiG) 2020-present

2021-present

National Organization of Gay and Lesbian Scientists and Technical Professionals (NOGLSTP)