Curriculum Vitae

Kuan-Fu Feng 馮冠芙

Postdoctoral Research Associate

Geology and Geophysics, University of Utah

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Google Scholar: https://scholar.google.com/citations?user=cFcJgigAAAAJ&hl=en&oi=ao

Research Interest

Environmental seismology, Volcanic seismology, Spatiotemporal changes in near-surface processes

Research Experience

2024/12 – present Postdoctoral Research Associate, Geology and Geophysics, University of Utah, US
2023/06 – 2024/11 Postdoctoral scholar, Earth and Space Sciences, University of Washington, US
2022/06 – 2023/05 Postdoctoral scholar, Geology and Geophysics, University of Utah, US
2022/02 – 2022/05 Postdoctoral scholar, Institute of Earth Sciences, Academia Sinica, Taiwan
2016/10 – 2017/08 Research assistant, Institute of Earth Sciences, Academia Sinica, Taiwan
2014/02 – 2014/06 Research assistant, National Chung Cheng University, Taiwan
2013/07 – 2013/08 Summer intern, Institute of Earth Sciences, Academia Sinica, Taiwan

Education

2017/09 – 2022/01 Ph.D., Geosciences, National Taiwan University, Taiwan
Advisor: Dr. Hsin-Hua Huang and Dr. Yih-Min Wu
2014/09 – 2016/06 M.S., Geosciences, National Taiwan University, Taiwan
Advisor: Dr. Yih-Min Wu
2010/09 – 2014/01 B.S., Earth and Environment Sciences, National Chung Cheng University, Taiwan

Manuscripts in Preparation

Feng, K.-F.*, M. Denolle, F-C. Lin and T. van Dam. (preprint) A decadal survey of the near-surface seismic velocity response to hydrological variations in Utah, United States. https://doi.org/10.31223/X52425 (*under review in the Journal of Geophysical Research: Solid Earth*)

Denolle, M., et al. (preprint). Training the Next Generation of Seismologists: Delivering Research-Grade Software Education for Cloud and HPC Computing through Diverse Training Modalities. arXiv preprint arXiv:2409.19147. https://doi.org/10.48550/arXiv.2409.19147 (*submitted to Seismological Research Letters*)

Feng, K.-F.*, M. Denolle and Y. Ni (*in prep*). Investigating near-surface seismic attenuation across the Pacific Northwest of the United States using ambient noise.

M. Kidiwela*, **K.-F. Feng**, M. Denolle, WSD Wilcock (*in prep*). Long-Term Signatures of Interseismic Deformation within Cascadia Subduction Zone Using Ambient Noise Interferometry

Peer-Reviewed Publication

Feng, K.-F.*, H.-H. Huang*, Ya-Ju Hsu and Y.-M. Wu (**2021**), Controls on seasonal variations of crustal seismic velocity in Taiwan using single-station cross-component analysis of ambient noise

interferometry, *J. Geophys. Res., Solid Earth, e2021JB022650.* https://doi.org/10.1029/2021JB022650.

Hsu, Y.-F., H.-H. Huang*, M.-H. Huang, V. C. Tsai, R. Y. Chuang, **K.-F. Feng** and S.-H. Lin (**2020**), Evidence for Fluid Migration During the 2016 Meinong Taiwan Aftershock Sequence, *J. Geophys. Res., Solid Earth, 125(9), e2020JB019994.* https://doi.org/10.1029/2020JB019994.

Feng, K.-F., H.-H. Huang* and Y.-M. Wu (**2020**), Detecting pre-eruptive magmatic processes of the 2018 eruption at Kilauea, Hawaii volcano with ambient noise interferometry. *Earth, Planets and Space*, 72:74. https://doi.org/10.1186/s40623-020-01199-x

Lee, S.-J.*, T.-C. Lin, **K.-F. Feng**, and T.-I. Liu (**2018**), Composite megathrust rupture from deep interplate to trench of the 2016 Solomon Islands earthquake. *Geophysical Research Letters*, 45(2), 674-681. https://doi.org/10.1002/2017GL076347

Brown, D.*, Y.-M. Wu, **K.-F. Feng**, W.-A. Chao, and H.-H. Huang (**2015**), Imaging high-pressure rock exhumation in eastern Taiwan. *Geology,* 43(7), 651-654. https://doi.org/10.1130/G36810.1

Selected Conference Presentation

2024 Seismological Society of America (SSA) Meeting, Alaska

Measuring shallow seismic attenuation across the Pacific Northwest of the United States using ambient noise seismology. Abstract S23C-0387 (Poster)

2023 American Geophysical Union (AGU) Fall Meeting, California

A decadal survey of the near-surface seismic velocity response to hydrological variations in Utah, United States. Abstract H54C-06 (Oral)

Investigating seismic attenuation across the Pacific Northwest of the United States using ambient noise. Abstract S23C-0387 (Poster)

2023 GAGE/SAGE 2023 Community Science Workshop, Pasadena, California

Investigating seismic velocity response to near-surface hydrological variations in Utah, United States. Abstract no. 100 (Poster)

2022 American Geophysical Union (AGU) Fall Meeting, Chicago

Investigating near-surface hydrological responses on crustal seismic velocity variations in subtropical and semi-arid regions. Abstract S15D-0230 (Poster)

2022 The 5th Taiwan Earthquake Center (TEC) Annual Meeting, Taiwan

A Noise-Based Monitoring System of Crustal Seismic Velocity Changes in Taiwan. (Oral)

2021 American Geophysical Union (AGU) Fall Meeting, ONLINE

Assessment of controlling factors on seasonal variations of crustal seismic velocity in Taiwan using ambient noise single-station cross-component analysis. (Poster)

2019 American Geophysical Union (AGU) Fall Meeting, California

Detection of a precursory phase of the 2018 magma eruption in the Lower East Rift Zone of Kilauea volcano, Hawaii. Abstract: 508923. Session: V43B-03 (Oral)

2019 European Geosciences Union (EGU) Annual Meeting, Vienna

Detection of a precursory phase of the 2018 magma eruption in the Lower East Rift Zone of Kilauea volcano, Hawaii. Abstract: EGU2019-3322 (Poster)

Professional Services/Volunteer Experiences

2024 Workshop Instructor on Ambient Noise Seismology in the Cloud, Seismic COmputational Platform for Empowering Discovery (SCOPED) Seattle Workshop

2024 Workshop Instructor on Data Mining on the Cloud 101, Seismological Society of America Meeting

2019 Summer Student Lecture Convenor, Institute of Earth Sciences, Academia Sinica, Taiwan

2018 Summer Student Lecture Convenor and Instructor, Institute of Earth Sciences, Academia Sinica, Taiwan

2018 President of the Graduate Student Association, Geosciences, National Taiwan University

Peer reviewer for *Geophysical Research Letters (2)*, *Journal Geophysical Research (4)*, *Nature Communications (1)*, *Earth, Planets and Space (1)*

Grants and Fellowships

2023 GAGE/SAGE 2023 Community Science Workshop Travel Grant

2022 Postdoctoral Research Abroad Fellowship, Ministry of Science and Technology, Taiwan

2021 Prof. Yi-Ben Tsai Graduate Student Scholarship, Chinese Taipei Geophysics Society (CGS)

2019 Travel Grant for attending international conferences, Institute of Earth Sciences, Academia Sinica, Taiwan

2019 Travel Grant for attending international conferences, Chinese Taipei Geophysics Society

2018 Travel Grant for attending international conferences, Ministry of Science and Technology, Taiwan

2013 Excellent Student Scholarship, Chinese Taipei Geophysical Society

2012 Outstanding Student Scholarship, National Chung Cheng University

2011 Outstanding Student Scholarship, National Chung Cheng University

2010 Outstanding Student Entrance Scholarship, National Chung Cheng University

Awards and Honors

2023 Professor Weizhou Ruan Memorial Fund Dissertation Award, Geological Society Located in Taipei

2022 Dean's Award, College of Science, National Taiwan University

2019 Outstanding Student Paper Awards in International Conferences, Earth Science Research Promotion Center (ESRPC), Taiwan

2019 Invited talk at Workshop on Frontiers in Seismic Interferometry

Teaching Assistantships

Geo2006, Geophysics, National Taiwan University

Geo5073, Time Series Analysis, National Taiwan University

Geo5101, Computer Programming on Geosciences, National Taiwan University

Field Experience

2022 Nodal seismic array deployment in Los Angeles Basin [LAB2022]

2019 Taiwan Chu-Lin landslide area monitoring seismic array deployment

2018 Taiwan Lan-Tai landslide area monitoring seismic array deployment

Computational Skills

Fortran, C, Python, Git, Bash Scripts

Thesis and Dissertation

Feng, K.-F. (**2022**) Noise-based monitoring on crustal seismic velocity variations. *PhD Dissertation, National Taiwan University.* (Supervisor: Dr. Hsin-Hua Huang and Dr. Yih-Min Wu)

Feng, K.-F. (**2016**) Investigating the uncertainty of time-dependent seismic velocity changes using travel time tomography: a case study of the M_L 6.4 2013 Rueisuei earthquake, Taiwan. *Master Thesis, National Taiwan University.* (Supervisor: Dr. Yih-Min Wu)