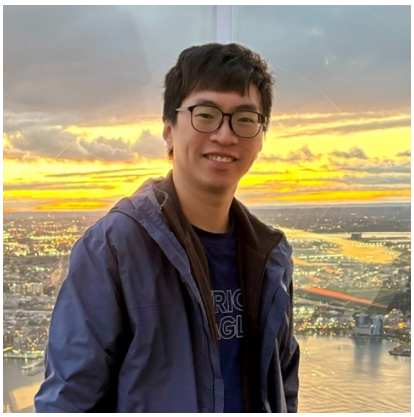

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[EDUCATION & EXPERIENCE]

- 2025/01 – 2026/12: Postdoctoral scholar, Institute of Earth Sciences, **Academia Sinica, Taipei, Taiwan**
- 2023/11 – 2024/12 : Postdoctoral research fellow, Dept. of Geosciences, **National Taiwan University, Taipei, Taiwan**
- 2022/11 – 2023/10 : Postdoctoral research fellow, Dept. Earth, Environmental and Planetary Sciences, **Brown University, Rhode Island, USA**
- 2021/11 – 2022/10 : Postdoctoral research fellow, Dept. Earth, Environmental and Planetary Sciences, **Brown University, Rhode Island, USA** (National Science and Technology Council Overseas Project for Postdoctoral Research)
- 2021/08 – 2021/09: Postdoctoral research assistant, Institute of Earth Sciences, **Academia Sinica, Taipei, Taiwan**
- 2020/08 – 2021/07 : Substitute military serviceman, National Conscription Agency, Ministry of the Interior
- 2018/08 – 2019/06 : Visiting student, Dept. Earth, Environmental and Planetary Sciences, **Brown University, Rhode Island, USA** (Ministry of Science and Technology Overseas Project for Post Graduate Research),
- 2015/09 – 2020/07 : Ph.D., Dept. Geosciences, **National Taiwan University, Taipei, Taiwan**
- 2013/09 – 2015/06 : M.S., Dept. Geophysics, **Nation Central University, Taoyuan, Taiwan**
- 2012/07 – 2012/08 : Member of summer undergraduate research program, Inst. Earth Sciences, **Academia Sinica, Taipei, Taiwan**
- 2009/09 – 2013/06 : B.S., Dept. Earth Sciences, **Nation Central University, Taoyuan, Taiwan**

[PROGRAM LANGUAGES]

- Fortran, Python, MATLAB, GMT, C-shell, awk shell, SAC

[RESEARCH INTERESTS]

- Seismic structure: oceanic lithosphere-asthenosphere structure; subduction zone; volcanic structure; sediment structure
- Seismic imaging techniques: tomographic inversion; ambient noise tomography; two-plane wave tomography; P-to-S and S-to-p receiver function
- Seismic/Ocean waves: short-to-long period surface waves; teleseismic scattered body waves; infragravity wave; T-wave

[PUBLICATIONS]

citations: 192; h-index: 7; i10-index: 6

*Corresponding Author

- *Ongoing Manuscripts: Submitted, In Review, and In Preparation*

- **Chen, K. X***., Gung, Y., & Romanowicz, B. (2024). Infragravity Wave Observations in the Pacific Ocean using Multiple Ocean-Bottom Seismometer Arrays. *Manuscript in preparation.*
- Chang, H. M., Liao, W. Y., **Chen, K. X.**, Liao, C. F., Lee, E. J., Gung, Y*., Chen, Y. N., Kuo, B. Y. (2024). Probing the SAA depth range using machine learning to measure short-period dispersion. *Manuscript in preparation.*

- *Published*

12. **Chen, K. X***., Kuo, B. Y., Lin, T. J., Lin, P. Y. P., Gung, Y., Tan, E., et al. (2024). Shear-dominant continental rifting in northern Ryukyu revealed by ambient noise tomography. Journal of Geophysical Research: Solid Earth, 129, e2024JB029448. https://doi.org/10.1029/2024JB029448

11. **Chen, K. X***., & Forsyth, D. W. (2024). On the Origin of the Hawaiian Swell: Lithosphere and Asthenosphere Seismic Structure From Rayleigh Wave Dispersion. *Journal of Geophysical Research: Solid Earth: Solid Earth*, 129(7), e2024JB029407. https://doi.org/10.1029/2024JB029407

10. Cheng, C. Y., Kuo-Chen, H.*, Brown, D., Yao, H., **Chen, K. X.**, & Ma, K. F. (2024). High-resolution 3D ambient noise tomography around the Meishan-Chiayi active fault system of western Taiwan. *Journal of Asian Earth Sciences: X* (accepted).

9. **Chen, K. X***., Forsyth, D. W., & Fischer, K. M. (2024). A mid-lithospheric discontinuity detected beneath 155 Ma western Pacific seafloor using Sp receiver functions. *Geophysical Research*

Letters, 51(5), e2024GL108347.

8. **Chen, K. X***., Fischer, K. M., Hua, J., & Gung, Y. (2020). Imaging crustal melt beneath northeast Japan with Ps receiver functions. *Earth and Planetary Science Letters*, 537, 116173.

7. Zellmer, G. F*., **Chen, K. X**., Gung, Y., Kuo, B. Y., & Yoshida, T. (2019). Magma transfer processes in the NE Japan arc: insights from crustal ambient noise tomography combined with volcanic eruption records. *Frontiers in Earth Science*, 7, 40.

6. **Chen, K. X***., Gung, Y., Kuo, B. Y., & Huang, T. Y. (2018). Crustal magmatism and deformation fabrics in northeast Japan revealed by ambient noise tomography. *Journal of Geophysical Research: Solid Earth*, 123(10), 8891-8906.

5. Zhang, Y., Yao, H*., Yang, H. Y., Cai, H. T., Fang, H., Xu, J., ... & **Chen, K. X.** (2018). 3-D crustal shear-wave velocity structure of the Taiwan Strait and Fujian, SE China, revealed by ambient noise tomography. *Journal of Geophysical Research: Solid Earth*, 123(9), 8016-8031.

4. Kuo-Chen, H*., **Chen, K. X**., Wei-Fang, S., Chun-Wei, H., Yuan-Hsi, L., Guan, Z. K., ... & Wen-Yen, C. (2017). 3D Vs ambient noise tomography of the 2016 Mw 6.4 Meinong Earthquake source region in Taiwan. *TAO: Terrestrial, Atmospheric and Oceanic Sciences*, 28(5), 6.

3. **Chen, K. X***., Kuo-Chen, H., Brown, D., Li, Q., Ye, Z., Liang, W. T., ... & Yao, H. (2016). Three-dimensional ambient noise tomography across the Taiwan Strait: The structure of a magma-poor rifted margin. *Tectonics*, 35(8), 1782-1792.

2. **Chen, K. X***., Chen, P. F., Chen, L. W., Yao, H., Fang, H., & Su, P. L. (2016). South Ilan Plain High-Resolution 3-D S-Wave Velocity from Ambient Noise Tomography. *Terrestrial, Atmospheric & Oceanic Sciences*, 27(3).

1. Chen, P. F*., **Chen, K. X**., & Cheng, H. Y. (2015). Frequent excitations of T waves by earthquakes in the South Mariana Arc. *Journal of Asian Earth Sciences*, 98, 50-60.

[AWARDS/ HONORS]

- 2020: 2018-2019 Top Downloaded Paper (Chen et al., 2018) in Journal of Geophysical Research: Solid Earth [Wiley]
- 2020: Selected Honorary Member of the Phi Tau Phi Scholastic Honor Society [National Taiwan University]
- 2020: Dean's Award of College of Science [National Taiwan University]
- 2020: The 40th Youth Forum: the Excellence Award [Department of Geology, National Taiwan. University]
- 2019: Prof. Yi-Ben Tsai Graduate Student Scholarship [Chinese Taipei Geophysical Society]
- 2017: Outstanding Student Paper Award [Earth Science Research Promotion Center, Ministry of. Science and Technology]
- 2016: Prof. Wei-zhou Ruan Memorial Scholarship [Department of Geology, National Taiwan. University]
- 2014: Outstanding Student Poster Award [2014 Taiwan Geosciences Assembly]
- 2013: Undergraduate Student Earth Science Research Competition: the Second Place [Department of Earth Sciences, National Central University]

[INVITED TALK]

- 2023/06: Imaging the upper mantle structure of the Pacific seafloor using surface wave and scattered body wave data: Case studies of the PLATE and PLUME OBS arrays @ Institute of Earth Sciences, Academia Sinica
- 2022/11: Preliminary Constraints in Seismic Velocity Discontinuity of 155 Ma Pacific Seafloor using S-to-P Receiver Functions of the PLATE Data. @ Dept. of Earth, Environmental and Planetary Sciences, Brown University
- 2018/10: Crustal magmatism and deformation fabrics in northeast Japan revealed by ambient noise tomography @ Dept. of Earth, Environmental and Planetary Sciences, Brown University

[PROFESSIONAL SERVICES]

- *Reviewer of manuscripts:* Journal of Geophysical Research: Solid Earth; Geochemistry, Geophysics, Geosystems; Bulletin of the Seismological Society of America; Geoscience Letters; Gondwana Research; Tectonophysics; etc.
- *Judge of Outstanding Student Presentation Award (OSPA)*: American Geophysical Union Fall Meeting, Japan Geoscience Union Meeting, AS-IES summer research program
- *Staff of IES Research Programs Open House: 2013, 2015, 2016, 2019*

[CONFERENCE PRESENTATIONS]

33. 2024 American Geophysical Union (AGU) fall meeting (poster), Infragravity Wave Observations in the Pacific Ocean Using Multiple Ocean-Bottom-Seismometer Arrays
32. 2024 American Geophysical Union (AGU) fall meeting (eLightning), On the origin of the Hawaiian Swell: Lithosphere and asthenosphere seismic structure from Rayleigh wave dispersion.
31. 2024 8th TEC Annual Meeting (oral), Lithosphere and Asthenosphere of the Pacific Seafloor Imaged by Seismic Waves Recorded by OBS Arrays.
30. 2024 Symposium on "Exploring the Earth's Interior From Geophysical, Geochemical and Geodynamical Perspectives" @IES, AS (oral), On the Origin of the Hawaiian Swell: Constraints from Lithosphere and Asthenosphere Seismic Structure.
29. 2024 Japan Geoscience Union Meeting (oral), Lithosphere and Asthenosphere Seismic Structure Beneath the Hawaiian Swell from Rayleigh Wave Dispersion.
28. 2024 Japan Geoscience Union Meeting (poster), Infragravity wave generation and propagation in the Pacific Ocean revealed by ambient noise correlation.
27. 2024 Annual Meeting of the Chinese Taipei Geophysical Society & Geological Society of Taiwan (oral), Lithosphere and Asthenosphere Seismic Structure Beneath the Hawaiian Swell from Rayleigh Wave Dispersion.
26. 2023 Symposium on the Dynamic Earth from Crust to Core-Mantle Boundary @IES, AS (oral), Receiver function imaging of the lithosphere-asthenosphere system beneath a 155 Ma Pacific seafloor: Results from the PLATE array.
25. 2023 Gordon Research Conference on Interior of the Earth (poster), Preliminary results of seismic discontinuity structure of the Alaska Peninsula subduction zone constrained by Sp receiver functions using AACSE data.
24. 2023 GAGE/SAGE Community Science Workshop (poster), Imaging oceanic lithosphere-

asthenosphere system beneath 155 Ma western Pacific using S-to-p receiver functions.

23. 2022 American Geophysical Union (AGU) fall meeting (poster), Imaging oceanic lithosphere-asthenosphere system beneath 155 Ma western Pacific using S-to-p receiver functions.
22. 2020 The 40th Youth Forum (oral), Image crustal melt beneath northeast Japan with ambient noise tomography and Ps receiver functions
21. 2019 American Geophysical Union (AGU) fall meeting (poster), Imaging crustal melt beneath northeast Japan with Ps receiver functions
20. 2019 Workshop on Frontiers in Seismic Interferometry (poster), Imaging crustal melt beneath northeast Japan with Ps receiver functions
19. 2018 American Geophysical Union (AGU) fall meeting (poster), Crustal and upper mantle seismic structure in northeast Japan constrained by ambient noise tomography and Ps receiver functions
18. 2018 Asia Oceania Geosciences Society 15th Annual Meeting (poster), Crustal seismic structure of SW Japan constrained by noise interferometry
17. 2017 American Geophysical Union (AGU) fall meeting (poster), Crustal magmatism and deformation fabrics in northeast Japan revealed by ambient noise tomography
16. 2017 2nd TEC Annual Meeting (oral), Crustal magmatism and deformation fabrics in northeast Japan revealed by ambient noise tomography
15. 2017 JpGU-AGU Joint Meeting (poster), Crustal structure and deformation fabrics in the Tohoku region, Japan, revealed by ambient noise tomography
14. 2017 Annual Meeting of the Chinese Taipei Geophysical Society & Geological Society of Taiwan (oral), Crustal structure and deformation fabrics in the Tohoku region, Japan, revealed by ambient noise tomography
13. 2016 American Geophysical Union (AGU) fall meeting (poster), Crustal seismic structure of Tohoku region, Japan constrained by ambient noises
12. 2016 1st TEC Annual Meeting (poster), Spatiotemporal Variation of Ambient Noise Levels and Cross-Correlations observed in Gujarat, India
11. 2016 1st TEC Annual Meeting (poster), Crustal seismic structure of Tohoku region, Japan constrained by ambient noises
10. 2016 BATS (Broadband Array in Taiwan for Seismology) open data services 20th anniversary conference (poster), 3D ambient noise tomography across the Taiwan Strait: the structure of a magma-poor rifted margin

9. 2016 Taiwan Geosciences Assembly (oral), Crustal seismic structure of Japan island constrained by ambient noises
8. 2016 Taiwan Geosciences Assembly (oral), 3D ambient noise tomography across the Taiwan Strait: the structure of a magma-poor rifted margin
7. 2015 The 8th World Chinese Geosciences Conference (poster), 3-D Shear Wave Crust and Upper-mantle Structure in Taiwan Strait using Ambient Noise Tomography
6. 2015 FACET (Feedbacks and coupling among climate, erosion and tectonics during mountain building) US-Taiwan Geoscience Workshop (poster), High-resolution 3-D Shear Wave Upper-crust Structures in Ilan Plain using Noise Tomography
5. 2015 Annual Meeting of the Chinese Taipei Geophysical Society & Geological Society of Taiwan (oral), High-resolution 3-D Shear Wave Upper-crust Structures in Ilan Plain using Noise Tomography
4. 2015 European Geosciences Union General Assembly (poster), High-resolution 3-D Shear Wave Upper-crust Structures in Ilan Plain using Ambient Noise Tomography
3. 2014 Asia Oceania Geosciences Society 11th Annual Meeting (poster), High Resolution Rayleigh Wave Tomography from Improved Ambient Noise Correlation Functions in Ilan Plain
2. 2014 Annual Meeting of the Chinese Taipei Geophysical Society & Geological Society of Taiwan (poster), High resolution Rayleigh wave tomography from improved Ambient Noise Correlation Functions in Yilan Plain
1. 2013 Taiwan Geosciences Assembly (poster), Seismometer Time Shift Correction using Cross-correlation Technique: Example of 1998-1999 BATS Waveform Data