CURRICULUM VITAE

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Education

- 2010-2014, B.S. in Geomatics Engineering, Hohai University, China
- 2014-2016, M.S. in Geodesy, University of Chinese Academy of Sciences, China
- 2016-2019 (expected), Ph.D. in Geophysics, University of Chinese Academy of Sciences, China

Research Interests

- Seismic imaging of the Earth's interior
- Lithospheric deformation and dynamics
- Geophysical joint inversion
- Seismic signal processing

Awards & Honors

- 2014 Ranked 1st in the admissions test at Institute of Geodesy and Geophysics, CAS
- 2016 Merit Student, University of Chinese Academy of Sciences
- 2016 Outstanding Student Paper Award, Annual Meeting of Chinese Geoscience Union (CGU)
- 2017 Merit Student, University of Chinese Academy of Sciences
- 2018 Winning Prize, The Third Session of the East Lake Academic Forum, Wuhan Branch of Chinese Academy of Sciences

Peer-Reviewed Publications (# denotes corresponding author)

*4. Xiong, C., **Ai, S.#**, Xie, Z. & Xiong, X. (**2019**). Phase velocity maps of the Taiwan Island from tomography of cross terms of ambient noise cross-correlation tensors. **Acta Seismologica Sinica**. (Accepted, in Chinese with English abstract)*

*3. **Ai, S.**, Zheng, Y., & Xiong, C. (**2019**). Ambient noise tomography across the Taiwan Strait, Taiwan Island and southwestern Ryukyu Arc: Implications for subsurface slab interactions. **Tectonics**. https://doi.org/10.1029/2018TC005355*

*2. **Ai, S.**, Zheng, Y., Riaz, M. S., Song, M., Zeng, S., & Xie, Z. (**2019**). Seismic evidence on different rifting mechanisms in southern and northern segments of the Fenhe-Weihe Rift zone. **Journal of Geophysical Research: Solid Earth**, 124. https://doi.org/10.1029/2018JB016476 (Nature Index)*

*1. Xiong, C., Xie, Z., Zheng, Y., Xiong, X., **Ai, S.**, & Xie, R. (**2019**). Rayleigh wave tomography in the crust and upper mantle of the Dabie-Tablu Orogenic zone. **Seismology and Geology**. (Accepted, in Chinese with English abstract)*

Papers in Review/Revision

***Ai, S.**, Zheng, Y., He, L., Wang, S., & Riaz, M. S. (**2019**). Investigating the mountain building process in Taiwan by joint inversion of Rayleigh wave ellipticity and phase velocity. In revision at **Journal of Geophysical Research: Solid Earth**.*

***Ai, S.**, Zhengy, Y., He, L., & Song, M. (**2019**). Joint inversion of ambient noise and earthquake data in the Trans-North China Orogen: on-going lithospheric modification and its impact on the Cenozoic continental rifting. Submitted to **Tectonophysics**.*

Manuscripts in Preparation

***Ai, S.**, Zheng, Y. et al. (**2019**). Limited extension of the Central NCC constrained by radial anisotropy.*

*Zheng, Y., **Ai, S.#** et al. (**2019**). Crust and uppermost mantle structure beneath the north and south China collision zone from joint inversion of receiver functions and ambient noise tomography.*

***Ai, S.**, Zheng, Y. et al. (**2019**). Joint inversion of Rayleigh wave ellipicity, phase velocity and receiver functions for high-resolution crustal model of the SE Tibet.*

***Ai, S.** et al. Crustal ductile deformation of the Taiwan Strait.*

Talks

*Zheng, Y. & **Ai, S.**, Subduction polarity flipping beneath Taiwan and its implications for mountain building process. South China Sea Institute of Oceanology, Chinese Academy of Sciences, Guangzhou, China, Jan. 25, 2019. (**Invited, upcoming**)*

***Ai, S.** & Zheng, Y., Limited extension of the Central NCC constrained by radial anisotropy. South China Sea Institute of Oceanology, Chinese Academy of Sciences, Guangzhou, China, Jan. 25, 2019. (**Invited, upcoming**)*

***Ai, S.**, Crust and uppermost mantle structure beneath the Trans-North China Orogen from joint inversion of ambient noise and earthquake data. 2018 Annual Meeting of Chinese Geoscience Union (CGU), Beijing, China, Oct. 22, 2018.*

***Ai, S.**, Possible different rifting mechanisms between south and north parts of the Fenhe-Weihe Rift zone revealed by shear velocity structures. 2017 Annual Meeting of Chinese Geoscience Union (CGU), Beijing, China, Oct. 18, 2017.*

***Ai, S.**, High-resolution crustal structure of the Shanxi Rift from joint inversion of ambient noise and receiver functions. Shanxi Earthquake Administration, Taiyuan, China, Sep. 12, 2017. (**Invited**)*

***Ai, S.**, Ambient noise tomography across the Taiwan Strait. 2016 Annual Meeting of Chinese Geoscience Union (CGU), Beijing, China, Oct. 17, 2016. (**Outstanding Student Paper Award**)*

Skills

- Computer Skills
  - Linux & Shell
  - Python, VB, C/C++
  - Adobe Illustrator, ArcGIS
- Seismological Tools
  - SAC, GMT, SOD, ObsPy, CPS
  - In addition, I'm opening to all computation and data processing science and skills, such as AI, deep learning, etc.

Updated at January 22, 2019