Fu Yin 尹扶

School of Earth and Space Sciences
University of Science and Technology of China
96 Jinzhai Road
Hefei, Anhui, 230026 China

yinfu@mail.ustc.edu.cn
yinfu.info
OUCyf

Education

2019–2022	M.S. Geological Engineering, University of Science and Technology of China, Hefei, China
2015–2019	B.S. Geo-Information Science and Technology, Ocean University of China, Qingdao, China

Research Interests

- Earthquake Source Inversion
- Ambient Noise Monitoring and Imaging
- Bayesian Inference (MCMC, reversible-jump MCMC, HMC and NUTS)
- Distributed Acoustic Sensing Technique (DAS) and High-Performance Computing (HPC)

Professional Societies & Activities

- Founder of the Seismology Notebook (2022)

Awards & Honors

2021 Outstanding Academic Report Nomination Award and Outstanding Academic Poster Award of the 2 ndEngineering Postgraduate Academic Forum, University of Science and Technology of China, China. Link-1 Link-2

2020 First-class Scholarship for Academics, University of Science and Technology of China, China

2018 Science and Technology Achievement Award, Ocean University of China, China

2018 1^{st} place at 5 th Applied Geophysical Skills Competition, Ocean University of China, China

2017 Second-class award at the 15 th Extracurricular Academic Science and Technology Works Competition, Shandong Association for Science and Technology. [top 3%]

2016 Outstanding Volunteer, People's Government of Shandong, China

Peer-reviewed Publications

*corresponding author, #co-first author.

Papers in Preparation

1. Yin, F.. Noise-based observation of velocity changes associated with effective pressure changes induced by water level changes in Dayindian water reservoir, Yunnan Province, China. in preparation.

Papers Submitted/Under Revision

1. Yin, F., & Wang, B*. (2021). MCMTpy: A Python Package for Source Parameters Inversion Based on Cut-And-Paste Algorithm and Markov Chain Monte Carlo. Seismological Research Letter, under revision.

Publications

1. Lei Y., Yin, F., Hong H., Li Y., & Wang, B*. (2021). Shallow structure imaging using higher-mode Rayleigh waves based on MF-J transform in DAS observation. Chinese Journal of Geophysics, 64(12), 4280–4291. doi:10.6038/cjg2021P0438

Meeting Abstracts

5. Yin, F.& Wang, B.. (2021). MCMC-MTpy: A Python Package for Simultaneous Inversion of Source Location, Focal Mechanism, and Rupture Directivity. Presented at SSA 2021 Annual Meeting, 6517, Physics-based Earthquake Rupture Modeling and Strong Motion Simulations.
4. Yin, F.& Wang, B.. (2021). Distributes acoustic sensing seismic observation and shallow surface structure imaging. Presented at The fifth National Youth Geological Congress, Guiyang, China.
3. Yin, F.& Wang, B.. (2021). MCMTpy: a source parameter inversion package based on Bayesian Inference and its application to the 2021 Yangbi earthquake. Presented at 2021 Annual Meeting of Chinese Geoscience Union, Zhuhai, China. (Pending due to Covid-19)
2. Yin, F.& Wang, B.. (2021). A numerical experiment for locating small variation in multiple scattering media based on MCMC method. Presented at 2021 Annual Meeting of Chinese Geoscience Union, Zhuhai, China. (Pending due to Covid-19)
1. Yin, F.& Wang, B.. (2020). Inversion of focal mechanism of small earthquakes in Hutubi gas storage area by multi-objective function full waveform matching method. Presented at 2020 Annual Meeting of Chinese Geoscience Union, Chongqing, China.

Talks

3. The 5th National Youth Geological Congress, Guiyang, China. 2021/04/25.
2. Workshop Earth and Space Sciences Student Research Symposium, University of Science and Technology of China. 2020/12/24. **[Invited]** **[Video]**
1. 2020 Annual Meeting of Chinese Geoscience Union (CGU). 2020/10/17.

Teaching Experience

Course

- Teaching Assitant, USTC course “Engineering Seismology” (2021 Spring)

Field Experience

- Seismic Observation Based on DAS Technique, Beijing, China, 2020/9/28–2020/10/7, installed 23 short-period stations (EPS), 47 short-period stations (Smartsolo), and 8 broadband stations around the 1-km optical cable
- Downhole Seismic Observation Based on DAS Technique, Hefei, China, 2021 spring, installed 36 short-period stations (Z-land) around the 400-m optical cable

Open Source Software

Year indicates when the project was started. All projects are currently ongoing.

2022 Latex-Template-Rice-USTC – A Latex template including book, thesis, and assignment for Rice and USTC university.
https://github.com/OUCyf/Latex-Template-Rice-USTC

2021 MCMTpy – A Python package designed for focal mechanism inversion and source parameters analysis.
https://github.com/OUCyf/MCMTpy

2021 NoiseCC – A framwork for ambient noise cross-correlation (CC) based on SeisNoise.jl in Julia.
https://github.com/OUCyf/NoiseCC