Stanford



Haipeng Li

Ph.D. Student in Geophysics, admitted Autumn 2022

Bio

BIO

Haipeng Li is a Ph.D. student in the Stanford Exploration Project (SEP), beginning in the fall of 2022. His research interests include studying the Earth's interior structures with seismic inversion and imaging methods. He focuses on investigating Distributed Acoustic Sensing in full-waveform inversion to resolve real-life problems including CO2 sequestration, hydrocarbon exploration, and urban environment monitoring. Also, He is exploiting high-performant numerical algorithms and SciML surrogates for seismic wavefield simulation across scales and medical imaging with ultrasounds.

HONORS AND AWARDS

- Shirley A. & Stanley H. Ward Scholarship, SEG (June 2022)
- Foundation/Chevron Scholarship, SEG (May 2021)
- Michael C. Forrest Scholarship, SEG (June 2020)
- Honorary International Exchange Student, Gov of Oklahoma (April 2019)

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

• Member, Society of Exploration Geophysicists (2019 - present)

EDUCATION AND CERTIFICATIONS

- M.S., University of Science and Technology of China , Geophysics (2022)
- B.S., China University of Petroleum (East China), Geophysics (2019)

Professional

WORK EXPERIENCE

• Geophysics Intern - Saudi Aramco Beijing Research Center (7/2019 - 8/2019)

Publications

PUBLICATIONS

• Continent-Continent Collision Between the South and North China Plates Revealed by Seismic Refraction and Reflection at the Southern Segment of the Tanlu Fault Zone Journal of Geophysical Research: Solid Earth

Li, H., Li, J., Luo, S., Bem, T. S., Yao, H., Huang, X. 2023; 128 (1): e2022JB025748

• Elastic Transmitted Wave Reverse Time Migration for Imaging Earth's Interior Discontinuities: A Numerical Study Bulletin of the Seismological Society of America

Li, H., Li, J.

2022

• A MULTI-AXIAL PERFECTLY MATCHED LAYER FOR FINITE-ELEMENT TIME-DOMAIN SIMULATION OF ANISOTROPIC ELASTIC WAVE PROPAGATION JOURNAL OF SEISMIC EXPLORATION

Li, H., Chen, J., Zhao, Z., Li, J. 2021; 30 (2): 173-200

• Application of full-waveform tomography on deep seismic profiling dataset for tectonic fault characterization Haipeng Li

Li, H., Li, J., Liu, B., Huang, X. 2021: 657-661

- Ambient Noise Surface Wave Reverse Time Migration for Fault Imaging *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH* Li, H., Li, J., Gu, N., Gao, J., Zhang, H. 2020; 125 (12)
- Forward modeling of ocean-bottom cable data and wave-mode separation in fluid-solid elastic media with irregular seabed *APPLIED GEOPHYSICS* Qu Ying-Ming, Sun Jun-Zhi, Li Zhen-Chun, Huang Jian-Ping, Li Hai-Peng, Sun Wen-Zhi 2018; 15 (3-4): 432-447