

# Jian Xu

Ph.D. Student in Geophysics

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## EDUCATION

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Visiting Ph.D. Student	McGill University	2023/11 - present
Ph.D.	University of Science and Technology of China	2021/9 - present
M.S.	University of Science and Technology of China	2019/9 - 2021/6
B.S.	University of Science and Technology of China	2015/9 - 2019/6

## PUBLICATION

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- (1) Li, J.\*, **Xu, J.**, Zhang, H.\*, Yang, W., Tan, Y., ... & Sun, J. (2023). High seismic velocity structures control moderate to strong induced earthquake behaviors by shale gas development. *Communications Earth & Environment*, 4(1), 188.
- (2) **Xu, J.**, Wang, K.\*, Li, J.\*, Gu, N., Ding, N., Qian, J., ... & Zhang, H. (2021). High resolution tomography of the Tanlu fault zone near Hefei with passive seismic and magnetotelluric linear array data. *Earthquake Science*, 34(1), 24-35.
- (3) **Xu, J.**, Li, J., Yang, W., Chen, G., Liu, Y., Harrington, R. M. et al. Shallow lingering and deep transient seismicity related to hydraulic fracturing in the Changning shale gas field, China. Under review.
- (4) Zhao, Y., Li, J.\*, **Xu, J.**, Yao, H.\*, Zhu, G., Yang, H., ... & Lu, R. (2023). High-resolution velocity structure and seismogenic potential of strong earthquakes in the Bamei-Kangding segment of the Xianshuihe fault zone. *Science China Earth Sciences*, 66(9), 1960-1978.

## RESEARCH INTEREST

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- (1) Source attributes of induced earthquakes
- (2) Velocity structure of subsurface reservoirs
- (3) Induced seismic hazard mitigation

## TECHNIQUE SKILLS

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- (1) High-precision seismicity catalog development
- (2) Ambient noise tomography
- (3) Geomechanical modeling (COMSOL)
- (4) In-situ  $V_p/V_s$  estimation

## AWARDS

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Outstanding Student Presentation Awards of China Geoscience Union	2023/10
IPACES - Poster Presentation Award - 2 <sup>nd</sup> Prize	2023/07
Outstanding Graduate Scholarship	2019/05
National Encouragement Scholarship	2017/10