Enze Zhang

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Google Scholar

Institute for Geophysics J.J. Pickle Research Campus Austin, TX 78758-4445



Education

2012 - 2016

Ph.D. in Geophysics 2016 - 2020 **B.Sc.** in Geophysics

The Chinese University of Hong Kong The University of Science and Technology of China

Research Experience

2021.08 - present

■ Postdoc Fellow

Institute for Geophysics, the University of Texas at Austin

2016.08 - 2021.07

Teaching and Research Assistant

Earth System Science Programme, The Chinese University of Hong Kong

2019.09 - 2020.02

▼ Visiting Student

Department of Geosciences and Natural Resource Management, University of Copenhagen

Research Publications

Journal Articles

- Goliber, S., Black, T., Catania, G., Lea, J. M., Olsen, H., Cheng, D., Bevan, S., Bjørk, A., Bunce, C., Brough, S., Carr, J. R., Cowton, T., Gardner, A., Fahrner, D., Hill, E., Joughin, I., Korsgaard, N., Luckman, A., Moon, T., ... Zhang, E. (2021). Termpicks: A century of greenland glacier terminus data for use in machine learning applications. The Cryosphere Discussions, 2021, 1–41.
- Zhang, E., Liu, L., Huang, L., & Ng, K. S. (2021). An automated, generalized, deep-learning-based method for delineating the calving fronts of greenland glaciers from multi-sensor remote sensing
- Zhang, B., Liu, L., Khan, S. A., van Dam, T., Bjørk, A. A., Peings, Y., Zhang, E., Bevis, M., Yao, Y., & Noël, B. (2019). Geodetic and model data reveal different spatio-temporal patterns of transient mass changes over greenland from 2007 to 2017. Earth and Planetary Science Letters, 515, 154–163. ♦ https://doi.org/10.1016/j.epsl.2019.03.028
- Zhang, E., Liu, L., & Huang, L. (2019). Automatically delineating the calving front of jakobshavn isbræ from multitemporal terrasar-x images: A deep learning approach. The Cryosphere, 13(6), 1729–1741.
- Zhang, B., Zhang, E., Liu, L., Khan, S. A., van Dam, T., Yao, Y., Bevis, M., & Helm, V. (2018). Geodetic measurements reveal short-term changes of glacial mass near jakobshavn isbræ (greenland) from 2007 to 2017. Earth and Planetary Science Letters, 503, 216-226. ♦ https://doi.org/10.1016/j.epsl.2018.09.029
- Zhang, B., Liu, L., Khan, S. A., van Dam, T., Zhang, E., & Yao, Y. (2017). Transient variations in glacial mass near upernavik isstrøm (west greenland) detected by the combined use of gps and grace data. Journal of Geophysical Research: Solid Earth, 122(12), 10, 626-10, 642.

♦ https://doi.org/10.1002/2017JB014529

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Honors & Awards

2022	UTIG Outstanding Postdoc Award	University of Texas Institute for Geophysics	
2021	Institutional Postdoctoral Fellowship	University of Texas Institute for Geophysics	
2020	Reaching Out Award	The Chinese University of Hong Kong	
2010	Global Scholarship Programme for Research Excellence		

The Chinese University of Hong Kong

Skills

General	Remote Sensing, Deep Learning, Batch Processing
Coding	MATLAB, Bash, GMT, ENVI, GDAL, Python, Google Earth Engine

Conference

2022	Machine Learning for Polar Regions Workshop, Oral Presentation	
	Automated glacier terminus extraction for Greenland	

AGU Fall Meeting, Oral Presentation
Automatically delineating calving fronts of Greenland glaciers from multi- sensor remote sensing imagery: a general method based on deep learning

AGU Fall Meeting, Poster Presentation
Automatically delineating terminus of Jakobshavn Isbræ from multi-sensor remote sensing imagery based on deep learning

Workshop on Glacial Isostatic Adjustment and Elastic Deformation, Poster Presentation Transient variations in ice mass near Jakobshavn Isbræ (west Greenland) detected by the combined use of GPS and GRACE data

Teaching Experience

Teaching Assisstant, Solid Earth Dynamics (ESSC2010)

- **Teaching Assisstant**, Engineering Geology and Applied Geophysics (ESSC4110)
- **Teaching Assisstant**, Statistical Methods and Data Analysis for Earth System Science (ESSC 4510)
- **Teaching Assisstant**, Remote Sensing (ESSC 4540)

Professional Services

Reviwer The Cryosphere, Remote Sensing of Environment, Remote Sensing, ISPRS Journal of Photogrammetry and Remote Sensing, Earth System Science Data