Kang Liang

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Research Interests

I am interested in promoting InSAR measurements accuracy and simplicity and understanding mechanics of slow moving landslides. My current focuses include:

- Fast InSAR processing with GPU
- Landslides triggered by glacier retreat and GIA
- Deep learning for landslides detection and deformation mapping

Education

Southern Methodist University — Dallas, Texas, U.S.
Ph.D. in Geophysics — *Aug 2020 – now*
Advisor: Prof. Zhong Lu

University of Science and Technology of China — Hefei, China
Bachelor in Geophysics — *Sep 2016 – Jun 2020*

Skills

Programming C, CUDA, Python, Matlab, LaTeX, Bash
Tools Vim, Git, Linux
Languages English, Mandarin

Publications And Talks

1. H. Fattahi, D. P. Bekaert, V. Brancato, Z. Yunjun, Z. Lu, M. G. Bato, J. W. Kim, S. Jeong, K. Liang, and S. Sangha, "Opera coregistered single look complex products from sentinel-1 data," in *Fall Meeting 2022*, AGU, 2022.

Projects Participated

Decorrelation - A InSAR postprocessing tool
- Serve as author and maintainer.
- Implement fast statistical homogenious pixels identification, adaptive multi-looking and phase linking with GPU support.
- Aim at high-performance hybird PS/DS processing.

ATBD: Notebooks for NISAR Solid Earth Algorithm Theoretical Basis Document
- Implement jupyter notebooks for ATBD transient deformation requirement (663).
- Help revise the algorithm theoretical basis document.

OPERA Coregistered Single Look Complex (CSLC) validation tools
- Help develop and validate jupyter notebooks for absolute and relative geolocation error for sentinel-1 SLC.

Awards

- Geoscience Climbing Scholarship, USTC *2019*
- National Encouragement Scholarship, USTC *2018*
- Physics Innovation Research Experimental Paper Competition Special Award, USTC *2018*
- 817 Alumni Awards Scholarship, USTC *2017*
- National Encouragement Scholarship, USTC *2017*