

# Kang Liang

Roy M. Huffington Department of Earth Sciences  
Southern Methodist University, Dallas Texas 75275  
✉ kangi@smu.edu  
🏡 <https://kanglcn.github.io> · GitHub [kanglcn](https://github.com/kanglcn)

## RESEARCH INTERESTS

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

- Deep learning for InSAR processing and analysis
- High performance computing for InSAR processing
- Landslides mechanism with geodetic observation

## EDUCATION

### Southern Methodist University

Ph.D. in Geophysics

Advisor: Prof. Zhong Lu

Dallas, Texas, U.S.

Aug 2020 – now

### University of Science and Technology of China

B.S. in Geophysics

Hefei, China

Sep 2016 – Jun 2020

## SKILLS

**Programming** C, CUDA, Python, Matlab, L<sup>A</sup>T<sub>E</sub>X, Bash

**Tools** Vim, Git, Linux

**Languages** English, Mandarin

## PUBLICATIONS

1. K. Liang, J. Kim, Z. Lu, M. G. Bato, V. Brancato, and H. Fattah, “The feasibility and requirements for offset tracking on gslc,” *AGU23*, 2023.
2. H. Fattah, 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.

## INVITED TALKS

1. “Offset tracking with geocoded SLC”, NASA OPERA Project Science Team

May 15th, 2024

## PROJECTS PARTICIPATED

### Moraine - Modern Radar Interferometry Environment; A simple, stupid InSAR postprocessing tool in big data era

- Serve as author and maintainer.
- Implement fast statistical homogenous pixels identification, adaptive multi-looking and phase linking with GPU support.
- Aim at high-performance hybrid 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