Mr. Junfei Wu

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Octagon Castle, Hangzhou City, Zhejiang, China (311100)

EDUCATION

Lanzhou University (Ranked 134th in Geosciences Worldwide) **Lanzhou, China**

MSc in Physical Geography, Average Score: 85.65/100 **Sep. 2019 - Jun. 2022**

- Thesis: *Evaluation of Reanalysis Snow Depth Datasets and Retrieval of Snow Depth Based on Passive Microwave Data in Selin Co and Nam Co Regions*
- Advisor: *Prof. Tandong Yao (AGU Fellow)*

Institute of Tibetan Plateau Research , Chinese Academy of Sciences (ITPCAS) **Beijing, China**

Joint MSc Program with Lanzhou University **Sep. 2019 - Jun. 2022**

- Advisor: *Prof. Tandong Yao*

Lanzhou University **Lanzhou, China**

BSc in Physical Geography and Resources and Environment, GPA: 4.04/5 **Sep. 2015 - Jun. 2019**

- Thesis: *Review of the Forming Conditions of Avalanche Research*
- Advisor: *Prof. Tandong Yao*

PROFESSIONAL EXPERIENCE

DiDi Global Company (Leading Online Taxi Booking Service in China) **Hangzhou, China**

Data Product Manager **Jul. 2022 - Present**

- Analyzed customer behavior patterns using extensive datasets to inform data-driven decisions.
- Designed and optimized a big data ETL (extraction, transformation, and loading) platform.
- Awarded the Outstanding Trainer Award for exceptional contributions to training in 2024.

PUBLICATIONS

[1] Yufeng Dai, Tao Wang, Yongwei Sheng, Lei Wang, Hongbin Chen, Xiaowen Zhang, Xiangyu Li, Weicai Wang, **Junfei Wu**, Wenfeng Chen, Tandong Yao. "***Westerly-triggered lake-effect snowfall enhanced with climate warming over the Tibetan Plateau*".** *Science Bulletin,* 69. 7 (2024): 968-977.

[2] **Junfei Wu**, Tandong Yao, Yufeng Dai, Wenfeng Chen. "***Evaluation of Passive Microwave Snow-Depth Retrieval Algorithm in Selin Co and Nam Co***". *Remote Sensing Technology and Application,* 37. 6 (2022): 1339-1349.

[3] Panpan Ji, Jianhui Chen, Aifeng Zhou, Rui Ma, Ruijin Chen, Shengqian Chen, Feiya Lv, Guoqiang Ding, Yan Liu, and Fahu Chen. "***Biofuels reserve controlled wildfire regimes since the last deglaciation: A record from Gonghai Lake, North China"***. *Geophysical Research Letters,* 48. 16 (2021): e2021GL094042. ——**Acknowledged for significant contributions to data analysis.**

SELECTED SCHOLARSHIPS&AWARDS

- **Third Prize Scholarship** for Graduate Students ($1,200, awarded three times, Top 50%) 2019 - 2022
- **Excellent Award** in the National University Meteorology Knowledge Competition (Top 10%) 2018
- **First Prize Scholarship** for Undergraduate Students ($400, awarded twice, Top 10%) 2017 - 2018
- **Third Prize Scholarship** for Undergraduate Students ($200, Top 30%) 2016

RESEARCH EXPERIENCE

***Graduate Research Assistant,* ITPCAS** Beijing, China

Advisor: *Prof. Tandong Yao* 2021 - 2022

- **Project Title**:
  - *Evaluation of Reanalysis Snow Depth Datasets and Retrieval of Snow Depth Based on Passive Microwave Data in Selin Co and Nam Co Regions*
- **Highlights**:
  - Constructed field meteorological stations to collect snow depth and other relevant data.
  - Evaluated the accuracy of snow depth derived from passive microwave data and reanalysis datasets (ERA5, GLDAS, JRA55, MERRA2) in the study area.
  - Applied advanced machine learning techniques (random forest regression, support vector regression) for snow depth retrieval, replacing traditional linear regression methods.
- **Outcomes**:
  - Published findings in *Remote Sensing Technology and Application* (Chinese Journal) in 2022.
  - Co-authored a paper published in *Science Bulletin* in 2024, with contributions to data collection and processing.

***Undergraduate Research Assistant,* College of Earth and Environmental Sciences, Lanzhou University** Lanzhou, China

Mentor*: Prof. Guan Chen* 2018

- **Project Title**:
  - *Land Subsidence in Mountain-Cutting Areas: A Case Study from Lanzhou New District*
- **Highlights**:
  - Compared the microstructures of soil samples from varying depths in both natural and mountain-cutting areas using a Scanning Electron Microscope.
- **Outcomes**:
  - Found that soil in mountain-cutting areas exhibited more structural damage and higher moisture content compared to natural areas, indicating a higher potential risk for subsidence.

TRAINING WORKSHOP

Glacio-hydrological Modelling Using the Spatial Processes in Hydrological Model (SPHY) Beijing, China

Trainers*: Prof. Arthur Lutz* and *Dr.Sonu Khanal*, FutureWater, The Netherlands 14 - 18 Oct. 2019

- Mastered the principles of a Python-based model through self-study after the training.
- Simulated surface runoff fluctuations across various spatiotemporal scales for the Selin Co and Nam Co regions.

RELEVANT SERVICES

● Volunteered at the National Geoscience Education Conference	Lanzhou, China	25 - 27 Sep. 2020
● Coordinated the Third Pole Environment (TPE) Science & Technology Training	Chengdu, China	12 - 23 Aug. 2019
● Volunteered at Annual Conference of The China Society on Tibetan Plateau	Nyingchi, China	8 - 10 Aug. 2018

SKILLS

Languages: English (IELTS 6.5, expired, currently renewing); Mandarin (Native)

Professional Software: ArcMap (Advanced), QGIS (Proficient), ENVI (Intermediate), SPSS (Intermediate)

Programming Languages: SQL (Advanced), Python (Proficient), Markdown (Intermediate), MATLAB (Intermediate)