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 2021 - 2022

Advisor: Prof. Tandong Yao

• 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

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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	ucation Conference	Lanzhou, China	25 - 27 Sep. 2020
• Coordinated the Third Pole Environment (T	PE) Science & Technology Training	Chengdu, China	12 - 23 Aug. 2019
• Volunteered at Annual Conference of The C	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)