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[Google Scholar](#)

EDUCATION BACKGROUND

Yunnan Normal University

Kunming, China

Doctor of Science

Sept 2018– Jun 2022

Major: Geographic Information System

Yunnan Normal University

Kunming, China

Master of Engineering

Sept 2015– Jun 2018

Major: Software Engineering

GPA: 3.6/4.0 (ranking first in the class)

Yunnan Normal University

Kunming, China

Bachelor of Engineering

Sept 2011– Jun 2015

Major: Computer Science and Technology

Bachelor of Economics

Sept 2012– Jun 2015

Major: Economics

PROFESSIONAL EXPERIENCE

Guangdong Baiyun University

Guangzhou, China

Lecturer

Sept 2021 – Jun 2022

- Taught undergraduate students courses related to big data and computer science.

RESEARCH EXPERIENCE

Postdoctoral Station of Statistics/Remote Sensing Big Data Intelligent Application Innovation Center, Guangzhou University

Sept 2022 – Present

- Conduct research on AI for science, multi-source image fusion, and remote sensing parameter inversion;
- Work on the following projects: “Impact of Climate Change on SARS-CoV-2 Epidemic in China” and “AI for Science: Data Estimation of Carbon stocks and Carbon Stock Spatiotemporal Distribution Based on Deep Learning”.

Engineering Research Center of GIS Technology in Western China of Ministry of Education of China

Sept 2015 – Jul 2022

- Focused on AI for science;
- Participated in a research project aimed at the monitoring of lake surface water temperature and lake water environment governance on the basis of deep learning.

Publications

- **Achievements:** Published 25 papers, including 7 in *Chinese Academy of Sciences (Division 1)*, 10 in *JCR (Q1)*, 8 in top journals, 15 in SCI journals, and 6 in Chinese core journals, with 599 citations from Google Scholar
- **Representative Papers:**
 1. **Yu, Z.**, Wang, J., Wang, P. & Xie, Y. Estimating forest carbon stocks from high-resolution remote sensing imagery by reducing domain shift with style transfer. *Remote Sensing of Environment*. (SCI, Q1, TOP) (Under review)
 2. **Yu, Z.**, Wang, J., Gao, S. & Hao, M. Improved implicit diffusion model with knowledge distillation to estimate the spatial distribution density of carbon stock in remote sensing imagery. *IEEE Transaction on Geoscience and Remote Sensing*. (SCI, Q1, Top) (Under review)

3. **Yu, Z.**, Yang, K., Luo, Y., & Shang, C. (2020). Spatial-temporal process simulation and prediction of chlorophyll-a concentration in Dianchi Lake based on wavelet analysis and long-short term memory network. *Journal of Hydrology*, 582, 124488. <https://doi.org/10.1016/j.jhydrol.2019.124488> (SCI, Q1, TOP)
4. **Yu, Z.**, Wang, J., Yang, X., & Ma, J. (2022). Superpixel-based Style Transfer Method for Single-temporal Remote Sensing Image Identification in Forest Types. *Remote Sensing*. (SCI, Q1, TOP)
5. **Yu, Z.**, Yang, K., Luo, Y., Wang, P., & Yang, Z. (2021). Research on the lake surface water temperature downscaling based on deep learning. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 1-1. <https://doi.org/10.1109/jstars.2021.3079357> (SCI, Q1)
6. **Yu, Z.**, Yang, K., Luo, Y., & Yang, Y. (2021). Secchi depth inversion and its temporal and spatial variation analysis - A case study of nine plateau lakes in Yunnan Province of China. *International Journal of Applied Earth Observation and Geoinformation*, 100, 102344. <https://doi.org/10.1016/j.jag.2021.102344> (SCI, Q1, TOP)
7. Yang, K.¹, **Yu, Z.**¹, & Luo, Y. (2020). Analysis on driving factors of lake surface water temperature for major lakes in Yunnan-Guizhou Plateau. *Water Research*, 184, 116018. <https://doi.org/10.1016/j.watres.2020.116018> (SCI, Q1, TOP)
8. **Yu, Z.**, Yang, K., Luo, Y., Shang, C., & Zhu, Y. (2020). Lake surface water temperature prediction and changing characteristics analysis - A case study of 11 natural lakes in Yunnan-Guizhou Plateau. *Journal of Cleaner Production*, 276. <https://doi.org/10.1016/j.jclepro.2020.122689> (SCI, Q1, TOP)
9. Yang, K., **Yu, Z.**, Luo, Y., Yang, Y., Zhao, L., & Zhou, X. (2018). Spatial and temporal variations in the relationship between lake water surface temperatures and water quality - A case study of Dianchi Lake. *Science of the Total Environment*, 624, 859-871. <https://doi.org/10.1016/j.scitotenv.2017.12.119> (SCI, Q1, TOP)
10. Yang, K.¹, **Yu, Z.**¹, Luo, Y., Zhou, X., & Shang, C. (2019). Spatial-Temporal Variation of Lake Surface Water Temperature and Its Driving Factors in Yunnan-Guizhou Plateau. *Water Resources Research*, 55(6), 4688-4703. <https://doi.org/10.1029/2019WR025316> (SCI, Q1, TOP)

ACTIVITIES

- **Volunteer** for the United Nations Children’s Fund (2023)
- **Silver Medal Winner** for the “LLM Science Exam – Use LLMs to answer difficult science questions” competition hosted by Kaggle (91/2745, Top 4%; 2023)
- **Bronze Medal Winner** for the “HuBMAP – Hacking the Human Vasculature” competition hosted by Kaggle (75/1021, Top 8%; 2023)
- **Reviewers** for such journals as *Water Research*, *Science of the Total Environment*, *Stochastic Environmental Research and Risk Assessment*, and *IEEE Access*

AWARDS

- Outstanding Graduates (2015, 2018, 2022)
- Excellent Graduation Thesis (2015, 2022)
- National Graduate Scholarship (2017, 2020, 2021)
- Merit Student in Yunnan Province (2021)
- Yunnan Provincial Government Scholarship (2016, 2019)
- National Computer Technology and Software Professional Technical Qualification (Level) Examination-Information System Project Manager (Senior-Level) (2016)
- High School Teacher Qualification Certificate for Information Technology(2015)
- National Computer Technology and Software Professional Technical Qualification (Level) Examination-Software Designer (Intermediate-Level) (2014)

ADDITIONAL INFORMATION

- **English Skills:** TOFEL-107; GRE-333 (Verbal-163; Quantitative-170; Writing-4.0)
- **Technical Skills:** Deep learning frameworks (PyTorch, Keras); GIS software (ArcGIS, ENVI); Programming languages (Python, R, Matlab, Java, JavaScript); Cloud platforms (Google Earth Engine)
- **Hobbies:** Playing basketball, Playing volleyball, Playing the cucurbit flute