

# Tiantao Jia

Email: [2049385306@qq.com](mailto:2049385306@qq.com)

## Education Background

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### Master of Science in Hydrology and Water Resources

Wuhan University, Wuhan, Hubei, China

2026.9–now

Supervisor: Prof. Jiyun Song

### Bachelor of Agriculture in Soil and Water Conservation and Desertification Control

Northwest A&F University, Yangling, Shaanxi, China

2022.9–2026.6

Bachelor's thesis selected as one of the university's **Top 100** Distinguished Papers.

GPA: 3.71/4.0, Rank: 1/65

## Research Interests

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1. Explore the spatiotemporal evolution and influencing factors of urban heat island effects under the continuous progress of urbanization.
  2. Analyze the variation rules and comprehensive risks of extreme precipitation in urban and regional hydrometeorological systems.

## Journal Publications

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1. Zhenhao Wei, Shu Zhu, **Tiantao Jia**, et al., 2026. Interactive effects of nitrogen and root exudate addition on soil organic carbon fractions in wheat agroecosystems. *Soil Ecology Letters*, 8(2): p.260393.

## Research Experience

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1. **Spatiotemporal Evolution Patterns of Urban Heat Islands in the Urbanization Process of the Yangtze River Ecological Economic**  
Undergraduate Graduation Thesis 2025-2026  
Adopted multi-source remote sensing data and spatial analysis to explore the spatiotemporal changes of land surface temperature, and analyzed driving factors of urban thermal environment.
  2. **Effects of Mineral-Bound Organic Carbon on Soil Carbon Pool in Vegetation Restoration of the Loess Plateau**  
Project Leader, NWAUFU 2024-2025  
Responsible for field sampling and laboratory tests. Analyzed variations of mineral-bound organic carbon and its impacts on soil carbon sequestration and pool stability.
  3. **Response of Soil and Water Conservation Functions of Artificial Forests to Deep Soil Desiccation in Hilly Loess Region**  
Core Member, NWAUFU 2023-2025  
Monitored soil moisture, runoff and sediment. Studied how soil desiccation affects water-soil conservation and proposed vegetation management strategies.

## Honors and Awards

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1. **National Scholarship**, 2024, 2025
2. **First-Class Professional Scholarship**, 2023, 2024, 2025
3. The Merit Student, NWAUFU, 2023, 2024
4. Provincial Second Prize, National College Mathematics Competition, 2023
5. University Second Prize, Mathematical Modeling Competition, NWAUFU, 2024
6. Provincial Third Prize, National University Computer Ability Challenge, 2024
7. National Second Prize & Provincial Second Prizes, 6<sup>th</sup> National University Municipal Environment AI Innovation Competition, 2024
8. University Second Prize, Five-Universities League of Forest Chemical Engineering, 2024
9. Provincial Second Prize, Blue Bridge Cup National Software and Information Technology Professional Talent Competition, 2025
10. Provincial Third Prize, National University Computer Design Competition (Northwest Division), 2025
11. Provincial Third Prize, National University Life Science Competition (Shaanxi Division), 2025
12. **100 Outstanding Undergraduate Graduation Theses Award**, 2026
13. **The Outstanding Graduate**, 2026

## Skills

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Software: SPSS, Origin, CAD, ArcGIS, Python

Language: Chinese (Native), English (CET-4: 469; CET-6: 454)