

## AI Agent Development/Test/Evaluation, ML/DL Modeling, Full-Stack Engineering

2+ Years work experience (US/International); 4+ Years research and programming experience.

### EDUCATION

**PhD Student** AI for Geosciences, University of Texas at Austin 2024 – expected May 2029  
GPA 3.9/4.0, Teaching Assistant for 260+ students, instructor rating ~ 4.5/5  
**B.S. in Geosciences (Honors Class)** University of Science and Technology of China 2020 – 2024  
Nominee of the **Highest Honor** for USTC undergrads (one of the two ESS School nominees)  
Founded one of the largest student clubs, grew from 0 to 1,200+ members [\[News\]](#)

### WORK EXPERIENCE

**AI Intern, AI Agent Knowledge Base Evaluation** **PineAI** (Singapore) | Remote | Jul. 2025 – Aug. 2025  
• Built an evaluation system from scratch for multi-dimensional assessment of PineAI Agent's knowledge base.  
• Developed a data sanitization module removing 2,000+ PII entries and noise from 1,000+ call sessions.  
• Extracted 3,000+ Q&A pairs (knowledge/method/strategy) from call sessions to form the evaluation dataset.  
• Designed a 5-dimensional evaluation engine using LLM-as-a-judge method with concurrent processing.

**Full-Stack Intern, LLM Text Processing System** **ZaiwenAI** | Beijing, China | Jun. 2025 – Jul. 2025  
• Acted as multiple roles in the startup, from design to deployment. | [\[Code\]](#) (non-company business) [\[Demo\]](#)  
• Developed 3-module MVP: LLM-footprint detection, removal, and plagiarism checking for researchers.  
• Built a RESTful backend with FastAPI and an asynchronous task queue with Celery + Redis.  
• Created a Vue.js frontend with 9-format document upload, SSE-based real-time LLM response streaming.

**Research Assistant, ML Model Development** **UT-Austin** | Austin, TX | Aug. 2025 – Present  
**Project Admin, High Performance Computing Allocation** **NSF NCAR** | Remote | Aug. 2025 – Present  
• Tech Stack: Physics-ML integrated modeling and machine learning parameter calibration.  
• Applied for and funded by the NSF NCAR's 1k GPU hrs, 22k CPU hrs high performance computing allocation.  
• Designed a framework to improve the efficiency of site-level parameter calibration using Scikit-learn.  
• Architecting a model framework delivering AI-powered precision, physics-powered interpretability.

**Full-Stack Developer, UT01 Navigation Page** **Independent** | Hybrid | Jun. 2025 – Present  
• Tech Stack: Jekyll, JavaScript/HTML/CSS | Impact: 10,700+ visits | [\[Code\]](#) [\[Website\]](#)  
• Created a unified resource platform for UT Austin's fragmented campus services based on user research.  
• Implemented SEO strategies to improve visibility; optimized frontend for cross-device compatibility.

**Visiting Scholar, High Altitude Observatory** **NSF NCAR** | Boulder, CO | Jul. 2023 – Dec. 2023  
• Simulated global atmospheric wave propagation, detecting 2 distinct wave modes from Hunga-Tonga eruption.  
• Integrated simulation/observation via wavelet analysis, advancing understanding of extreme volcanic events.  
• First-authored presentation at a NASA Science Workshop and AGU Meeting. | [\[Code\]](#) [\[Abstract\]](#)

### PUBLICATIONS

1. **Wu, K.**, Yi, W.\*, Xue, X.\*, Reid, I., & Lu, M. (2024). Diurnal and seasonal variations of meteor speed and arrival angle observed by Mengcheng meteor radar. *JGR: Space Physics*. [\[Paper\]](#) [\[Data\]](#)
2. **Wu, K.**\*, Xu, X., Jiang, J., & Shen, A. (2024). A Summary Report on the Space Physics Practical Education in 2022. *Rev Geophys and Planetary Phys*. [\[Paper\]](#) [\[News\]](#)

### SKILLS

- **Programming:** Python, FastAPI, Node.js, PostgreSQL, Redis, Docker, AWS/GCP, JavaScript, React, MATLAB

