

# Xiao Fan

Homepage: [xiaofan.ac.cn](http://xiaofan.ac.cn)  
[Google Scholar Profile] [GitHub Profile] [Linkedin Profile]

Email: [xiaofan140@gmail.com](mailto:xiaofan140@gmail.com)  
Mobile: +86-158-007-88661  
WeChat ID: AnikiFan

## EDUCATION

- Tongji University · College of Computer Science and Technology** Shanghai, China  
*B.Eng. in Data Science and Big Data Technology; GPA: 4.84/5; Rank: 1/37* 2022.09–2026.06
- Tsinghua University · Tsinghua Shenzhen International Graduate School** Shenzhen, China  
*D.Eng. in Electronic Information, advised by Prof. Zhi Wang* 2026.09–2031.06

## RESEARCH INTERESTS

- Test-Time Adaptation** 2025.01–Present  
*Test-time model adaptation under data distribution shifts (domain shift) without access to source data.*
- Self-Evolving Embodied Agent** 2025.05–Present  
*Embodied agents that learn from environmental interaction to continually self-improve.*

## EXPERIENCE

- HeyWhale** Remote  
*Data Analyst Intern (Part-time)* 2024.07–2024.08
  - Community Support in Data Science:** Provided timely answers and guidance to learners and developers on data analysis, machine learning, statistics, and visualization questions in online communities.
  - Tutorial and Educational Content Creation:** Designed and authored clear, structured tutorials and guides, translating complex data science concepts into practical, easy-to-follow instructions.
  - Knowledge Sharing and Engagement:** Enhanced community learning by sharing example code, best practices, and learning paths to improve technical skills and foster engagement.

## PUBLICATIONS (\* EQUAL CONTRIBUTION, † CORRESPONDING AUTHOR)

- Beyond the Exploration-Exploitation Trade-off: A Hidden State Approach for LLM Reasoning in RLVR** 2025  
Fanding Huang\*, Guanbo Huang\*, **Xiao Fan**, Yi He, Xiao Liang, Xiao Chen, Qinting Jiang, Faisal Nadeem Khan, Jingyan Jiang†, Zhi Wang†  
*Submitted to ACL ARR 2026.*  
Keywords: LLM Reasoning, Reinforcement Learning, Representation Interpretability  
[PDF] [BibTeX] [Code] [Project Page]
- MoETTA: Test-Time Adaptation Under Mixed Distribution Shifts with MoE-LayerNorm** 2026  
**Xiao Fan**, Jingyan Jiang†, Zhaoru Chen, Fanding Huang, Xiao Chen, Qinting Jiang, Bowen Zhang, Xing Tang, Zhi Wang  
*Proceedings of the 40th Annual AAAI Conference on Artificial Intelligence (AAAI, CCF-A, 17.6% overall acceptance rate)*  
Keywords: Test-Time Adaptation, Mixture of Experts  
[PDF] [BibTeX] [Code] [Poster]

## SELECTED HONORS AND AWARDS

- Global Campus AI Algorithm Elite Competition** National 1st Prize  
*Challenge: “BIRADS Classification and Feature Recognition in Ultrasound Breast Images”* 2024.11
- 15th Lanqiao Cup** National 3rd Prize  
*Python Programming* 2025.08
- Tongji University Excellent Student Scholarship** 1st Prize  
*Guo Xie Birong Scholarship, 2 out of 756 students* 2023.12

## SKILLS SUMMARY(\* EXPERT, † PROFICIENT, ‡ BASIC, § HANDS-ON EXPERIENCE)

- Programming:** Python\*, C++†, C†, Bash‡, SQL‡, JavaScript§, TypeScript§
- Frameworks:** PyTorch†, Scikit†, Streamlit†, Next.js‡, Qt Quick‡, TailwindCSS‡
- Tools:** Pandas†, L<sup>A</sup>T<sub>E</sub>X†, Vim†, Tmux†, Git†, Matplotlib†, Docker‡
- Languages:** English† (CET-4: 658, Top 1%; CET-6: 608, ~Top 5%), Japanese§ (Self-Study on Duolingo)
- Sports:** Men’s Pistol\* (10m Air, 25m Rapid Fire, 50m Free; Achieved 1st Place (Team) and 4th Place (Individual) at Shanghai City Championship), Badminton†, Golf‡, Indoor Climbing‡

## VOLUNTEER EXPERIENCE

- Math Takeaway (Campus Public Welfare Organization)** Tongji University  
*Lecturer for Linear Algebra* 2025.09–2025.12
  - Delivered a Linear Algebra final exam review lecture.
  - Co-developed two chapter-level knowledge summaries and revision sessions.
  - Produced and published recorded revision lectures on Bilibili.