

EDUCATION

Tsinghua University

Beijing, China

Dual Major: Computer Science and Technology & Economics and Finance

2022 - 2026

- **GPA:** 3.9/4.0, **Ranked** 6-th among dual major students.
- **Selected A Courses:** Data Mining (A+, Top 1), ODE (A+, Top 1), Artificial Intelligence, Computer Graphics, Linear Algebra (Advanced), Discrete Mathematics, Computational Humanities and Social Sciences, Computer Networks, Linear Algebra, Calculus A(2), etc.
- **Academic Interests:** ML, NLP, AI4Science.

RESEARCH EXPERIENCES

Chi Jin's Group, Princeton | Remote

2024.11 - Present

- Research intern, advised by Prof. Chi Jin. Working with Dr. Yong Lin.
- Working on autonomous math theorem proving with formal language.

Rose Spatiotemporal Lab, UCSD | San Diego, CA, USA

2024.07 - 2024.11

- Research intern, advised by Prof. Rose Yu. Worked with Dr. Yadi Cao.
- Worked on aligning large language models with the physical world.

Tsinghua NLP Lab | Beijing, China

2023.07 - Present

- Led **Agent Imitation Learning** and **OpenAgent** projects, member of **XAgent** team.
- Exploring multimodal learning and the applications of large models in natural sciences domain.

PUBLICATIONS AND PROJECTS

1. Yong Lin*, Shange Tang*, **Bohan Lyu**, Jiayun Wu, Hongzhou Lin, Kaiyu Yang, Jia Li, Mengzhou Xia, Danqi Chen, Sanjeev Arora, Chi Jin. **Goedel-Prover: A Frontier Model for Open-Source Automated Theorem Proving**. Technical Report, 2025.
2. **Bohan Lyu***, Yadi Cao*, Duncan Watson-Parris, Leon Bergen, Taylor Berg-Kirkpatrick, Rose Yu. **Adapting While Learning: Grounding LLMs for Scientific Problems with Intelligent Tool Usage Adaptation**. *International Conference on Machine Learning (ICML) 2025, AAAI Fall Symposium Series (Oral) 2024*.
3. **Bohan Lyu***, Xin Cong*, Heyang Yu, Pan Yang, Yujia Qin, Yining Ye, Yaxi Lu, Zhong Zhang, Yukun Yan, Yankai Lin, Zhiyuan Liu, Maosong Sun. **Enhancing LLM's Capabilities in Open Domains via Autonomous Tool Integration**. *Proceedings of Annual Meeting of the Association for Computational Linguistics (ACL, Main Conference) 2025*.

AWARDS AND HONORS

- **No. 1/636**, Baidu Inc. Data Mining Competition (Loan Default Prediction) 2024.06
- Spark Scientific and Technological Innovation Fellowship (**Top 1%** in Tsinghua) 2024.05
- **First Prize**, National College Student Mathematical Modeling Contest (Beijing) 2023.10
- **Second Place & Newcomer Prize**, Tsinghua University's Challenge Cup 2024.04
- **Best Paper of Popularity**, Contest of Scientific Communication 2024.05
- **Team Gold Prize**, Digital Economy Research Project 2023.11
- **Third Place**, Tsinghua University's Business Imitation Contest 2022.10

SCHOLARSHIPS AND RESEARCH GRANTS

- **Global Exploration Initiative**, ¥20,000, Grade A 2024.04
- **Academic Advancement Program**, ¥20,000, Grade B 2024.05
- **‘Sparking Program’**, ¥15,000 2024.05
- **Student Research Training**, ¥5,000 2024.05
- **Scientific and Technological Innovation Excellence Scholarship**, ¥5,000 2024.11
- **Tsinghua University’s Challenge Cup**, ¥3,000 2024.03

SKILLS

Languages: English, Chinese.
Programming: Python, C/C++, System Verilog, L^AT_EX, MATLAB, etc.
Tools: Ray, DeepSpeed, vllm, Docker, etc.

ACADEMIC SERVICES

Reviewers for: *ICLR 2025, LLMagents @ ICLR 2024, AI4MATH @ ICML 2024.*
Member of ‘Sparking Program’, the most prestigious and selective academic organization at Tsinghua University.