# Junxi Yan

*Prospective master of 2025 Fall*

*Tsinghua University, China*

(+86) 158-4014-0210 | 2430833252@qq.com | yanjx2021.github.io/

## Education

**Tsinghua University, Undergraduate**                                                          *Beijing,China*

B.S. IN COMPUTER SCIENCE AND FINANCE                                                      *Sep. 2021 - Present*

- **GPA: 3.67 / 4.00.**
- A member of **THUNLP** (THU Natural Language Processing Group), advised by Associate Professor Zhiyuan Liu.

## Publication

- Yujia Qin, Shengding Hu, Yankai Lin, Weize Chen, Ning Ding, Ganqu Cui, Zheni Zeng, Yufei Huang, Chaojun Xiao, Chi Han, Yi Ren Fung, Yusheng Su, Huadong Wang, Cheng Qian, Runchu Tian, Kunlun Zhu, Shihao Liang, Xingyu Shen, Bokai Xu, Zhen Zhang, Yining Ye, Bowen Li, Ziwei Tang, Jing Yi, Yuzhang Zhu, Zhenning Dai, Lan Yan, Xin Cong, Yaxi Lu, Weilin Zhao, Yuxiang Huang, **Junxi Yan**, Xu Han, Xian Sun, Dahai Li, Jason Phang, Cheng Yang, Tongshuang Wu, Heng Ji, Zhiyuan Liu, Maosong Sun. *Tool Learning with Foundation Models.*

## Work Experience

### Tool Learning with Foundational Models

WORK AS A RESEARCH ASSISTANT.                                                            *Jan. 2023 - Apr. 2023*

- Survey paper. Collaborated with CMU, UIUC and NYU.
- Explored LLM's ability to utilize external tools in various scenarios; Formulated a general tool learning framework, in which the foundational model understands human instructions, adjusts its tool-using plan through reasoning, and effectively conquer the target tasks.
- Contributed to the survey paper writing; Conducted experiments and case studies under various scenarios including image generation, speech-to-text,language translation.
- Contributor to the paper. Submitted to Nature Machine Intelligence, under review.

### Instant messaging system - DMail

WORK AS A TEAM MEMBER                                                                    *Mar. 2023 - Jun. 2023*

- Software engineering project.
- Built a mature instant messaging system product in the span of one semester. Explore the feasibility of deploying a personal communication system anytime, anywhere, and delved into the rules and boundaries that software engineering projects should adhere to.
- Contributed to the project; Completed the frontend interface design of the communication system and enhanced its interaction with the back-end.
- Selected the best project for the *Spring 2023 Software Engineering* course.

## Skills

### LANGUAGE SKILLS

- **TOEFL** 101/120 (Reading 29, Listening 28, Speaking 21, Writing 23.
- Pass the **CET4** (College English Test-Band 4)
- Basic knowledge of Greek; Completed the course *Greek (Second Foreign Language)*.

### TECHNIQUE SKILLS

- Proficient in C/C++, Python, JavaScript, Linux, Latex, Stata.
- Also proficient in WORD, PPT, excel and other office software, able to arrange and process documents and other practical skills.

## Extracurricular Activity

**THUSAST (Student Association for Science and Technology)**                    *Tsinghua University,Beijing*

CORE MEMBER OF THE EVENTS DEPARTMENT                                                      *Orc. 2021 - Aug. 2023*

- Assisted the chair and the head of the events department in organizing dozens of school-level science and innovation events in two years, including but not limited to the *Tsinghua University Big Idea Challenge, Drone Competition, Challenge Cup*, and a software design competition in cooperation with Shaoxing local government.
- Primarily responsible for assisting with planning and event organization.

**Basketball Representative Team of SEM (School of Economics and Management)**    *Tsinghua University,Beijing*

Team's Point Guard                                                                                          *Sep. 2021 - present*

- Won the *2022 Ma Yuehan Cup* championship, the first championship in the past 16 years.
- Won the MVP award (Most Valuable Player) of the *2021 Sixian Cup.*

## **Sum**mary ─────────────────────────────────────────

Undergraduate student at Tsinghua University, with a double major in Computer Science and Finance. A member of research group – THUNLP. Have broad interests in natural language processing, with a particular focus on pre-trained language models, tool learning and tool creation of large language models. Possess software engineering development experience and have completed several mature software projects. Also, have a background in finance, having studied corporate finance, accounting, and econometrics, with a particular interest in quantitative trading.

Skilled in communication, have a strong sense of belonging to the team and willing to take the initiative to assume more responsibilities; Hosted numerous major campus events and have a keen interest in management. Having previously attended an extended education program, I am two years younger than my peers, but it has made me more imaginative, energetic, and creative.