

Yufan Dang

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Education

Tsinghua University Beijing, China

B.S. Software and Mathematics & physics science (double major)

Sep 2021 - Jun 2025(expected)

Current GPA: 3.86/4.0

College entrance ranking: 9/370

AWARDS

Second Prize of Challenge Cup in Tsinghua(2024), Comprehensive Scholarship (top 10%, 2023), School-level Social Work Scholarship (2023), School-level Social Practice Scholarship (2022)

COURSEWORK

Computer Science Courses: Machine Learning, Software Engineering, Computer Organization Principle, Database, Operating System, Introduction to Algorithms, Data Structure

Mathematics Courses: Numerical Analysis, Elementary Probability Theory, Statistical Inference, Introduction to Complex Analysis, Linear Algebra, Calculus

Publications

Experiential Co-Learning of Software-Developing Agents [ACL 2024, main conference](#)

Chen Qian[†], **Yufan Dang**[†], Jiahao Li, Wei Liu, Weize Chen, Cheng Yang, Zhiyuan Liu, Maosong Sun

Communicative Agents for Software Development [ACL 2024, main conference](#)

Chen Qian, Xin Cong, Wei Liu, Cheng Yang, Weize Chen, Yusheng Su, **Yufan Dang**, Jiahao Li, Juyuan Xu, Dahai Li, Zhiyuan Liu, Maosong Sun

Iterative Experience Refinement of Software-Developing Agents [In arXiv 2405.04219](#)

Chen Qian, Jiahao Li, **Yufan Dang**, Wei Liu, YiFei Wang, Zihao Xie, Weize Chen, Cheng Yang, Yingli Zhang, Zhiyuan Liu, Maosong Sun

Scaling Large-Language-Model-based Multi-Agent Collaboration [In arXiv 2406.07155](#)

Chen Qian, Zihao Xie, Yifei Wang, Wei Liu, **Yufan Dang**, Zhuoyun Du, Weize Chen, Cheng Yang, Zhiyuan Liu, Maosong Sun

Multi-Agent Software Development through Cross-Team Collaboration [In arXiv 2406.08979](#)

Zhuoyun Du, Chen Qian, Wei Liu, Zihao Xie, Yifei Wang, **Yufan Dang**, Weize Chen, Cheng Yang

Autonomous Agents for Collaborative Task under Information Asymmetry [In arXiv 2406.14928](#)

Wei Liu, Chenxi Wang, Yifei Wang, Zihao Xie, Rennai Qiu, **Yufan Dang**, Zhuoyun Du, Weize Chen, Cheng Yang, Chen Qian

Research Experience

THUNLP *Natural Language Processing Lab at Tsinghua University*

Jul 2023 – Present

Research Intern

- Engaging in the ChatDev open-source project, a multi-agent framework for software development powered by large language models (LLMs). This project has garnered over 19k stars on GitHub and features an AI-native SaaS application.
- As a contributor to ChatDev, devoted on streamlining dialogue-related mechanisms within AI, conducting multiple tests, optimizing the project's frontend, and performing daily operational maintenance for overall project enhancement.

- Actively engaged in exploring agent-oriented learning and evolving paradigms, proposing the multi-agent Experiential Co-Learning (ECL) paradigm. Extensive experiments demonstrate that the framework empowers agents to more effectively tackle unseen software-developing tasks.
- Extended the ECL paradigm into a dynamic style: the Iterative Experience Refinement framework, enabling LLM agents to iteratively refine experiences during task execution.

Student Research Training Program *Autonomous Department, Tsinghua University* Nov 2022 – Jun 2023
Participant

- Focus on multi-agent and multimodal perception based on deep learning in driving scenarios, researched the state-of-the-art multimodal perception network
- Used Pytorch to replicate advanced algorithms in communication-efficient collaborative perception and reproduced consistent experimental results

Extracurricular Experience

Student Science Association | *Vice President* Mar 2022 - Present
Endavoring to building innovative technical competition under industrial background

Student Social Practice | *Team Leader, Member* Jan 2022 - Aug 2023
Received two Departmental-Level Awards and one University-Level Award, with one report featured in *Rural Revitalization Inquiries* (as the second author)

ChunYu Development Program | *Member* Apr 2023 - Present
Elaborating on involvement in the program, with a focus on leadership related to governance or political awareness

Tsinghua Student Association of Rural Revitalization | *Vice President* Jul 2022 - Feb 2023
Actively seek for collaboration across universities

Skills

Languages: C/C++, Python, C#, JavaScript, HTML/CSS, L^AT_EX
Tools: Git/GitHub, Pytorch, Linux