

ZIMING YOU

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EDUCATION

Peking University

Master of Engineering in Software Engineering

GPA: 3.50/4.0

Beijing, China

Expected July 2025

Beihang University

Bachelor of Engineering in Computer Science & Technology

GPA: 3.69/4.0

Beijing, China

September 2018 – July 2022

PUBLICATIONS

[1] Internet of Agents: Weaving a Web of Heterogeneous Agents for Collaborative Intelligence

Weize Chen*, **Ziming You***, Ran Li*, Yitong Guan*, Chen Qian, Chenyang Zhao, Cheng Yang, Ruobing Xie, Zhiyuan Liu, Maosong Sun [[Paper](#)]

ICLR (Spotlight). 2025 (Co-first author)

[2] DatawiseAgent: A Notebook-Centric LLM Agent Framework for Automating Data Science

Ziming You, Yumiao Zhang, Dexuan Xu, Yiwei Lou, Yu Huang

ArXiv preprint forthcoming (March 2025). In preparation for submission to **EMNLP 2025**

RESEARCH EXPERIENCE

Internet of Agents: Weaving a Web of Heterogeneous Agents for Collaborative Intelligence

Advisors: **Prof. Zhiyuan Liu** (Tsinghua University)

November 2023 – January 2025

- **Introduction:** Conducted research as main author on LLM-based multi-agent systems, focusing on advancing the Internet of Agents framework for scalable and adaptive distributed multi-agent collaboration. **IoA** received **600+ stars** on [GitHub](#) and was widely shared on X, including repost from influencers such as [AK](#).
- **Task&Action:** Contributed to the design of the three-layer architecture in both server and client sides of IoA, and implementation of core modules, including agent registration and discovery, autonomous nested team formation, autonomous conversation flow control, task assignment and execution. Contributed to experiments on GAIA benchmark and self-curated open-end instruction datasets to evaluate IoA's capability in integrating agents with heterogeneous tools and proficiency in integrating and orchestrating agents with heterogeneous architectures. Contributed to creating a more efficient and potentially more tailored communication layer for IoA by fine-tuning Llama 3 8B and evaluating the performance on open-end instructions benchmark.
- **Results:** Achieved **40%** average score, which was the SoTA performance on the validation set of GAIA benchmark by instantiating IoA with only four ReAct agents. Achieved a win rate of **66% to 76%** in open-domain task evaluations when comparing IoA integrating AutoGPT and Open Interpreter to each agent individually. Co-authored the paper [1] showcasing our findings and the potential of IoA for collaborative intelligence.

DatawiseAgent: A Notebook-Centric LLM Agent Framework for Automating Data Science

Advisors: **Prof. Yu Huang** (Peking University)

August 2024 – March 2025

- **Introduction:** Conducted research as the main author on **LLM-based data science agent**, proposing DatawiseAgent, a notebook-centric LLM agent framework designed to enhance the flexibility and adaptability of automated data science workflows. **Independently led the entire scientific research process**, including problem selection, literature review, idea formulation, framework design & implementation, experimentation, ablation analysis, and paper writing.
- **Contribution:** Introduced an FST-based multi-stage design with a unified interaction representation, consisting of four stages: DFS-like planning, incremental execution, self-debugging, and post-filtering. This design allows the agent to break down complex tasks, generate the text and code incrementally, and iteratively refine code through fine-grained real-time feedback. Extensive experiments on data analysis, visualization, and data modeling, show that DatawiseAgent **consistently outperforms or matches state-of-the-arts methods across multiple model settings**.

WORK EXPERIENCE

Research Internship for Multi-agent System

Advisors: **Prof. Zhiyuan Liu** (Tsinghua University)

Tsinghua University

November 2023 - June 2024

- Led key developments of the Internet of Agents (IoA) framework and co-authored the paper Internet of Agents.

Engineering Internship

Full-time Internship in LLM Algorithms

ModelBest Inc. (面壁智能)

May 2023 - October 2023

- Reproduced and improved research to enhance Chinese models' instruction-following, multi-turn dialogue, and security capabilities.
- Explored and facilitated the integration of LLMs into financial services to optimize business applications.