Jiale Liu

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Google Scholar
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EDUCATION

- **Penn State University** — State College, PA
  Ph.D in Informatics — 08/2024 - 06/2028 (Expected)
  GPA: 3.9/4.0.

- **Xidian University** — Xi'an, China
  B.Eng in Computer Science and Engineering — 09/2020 - 06/2024
  GPA: 3.9/4.0; Major score: 92.0/100; Rank: 1/134

PUBLICATIONS

(* indicates equal contribution)

- **Jiale Liu**, Yifan Zeng, Shaokun Zhang, Chi Zhang, Malte Højmark-Bertelsen, Marie Normann Gadeberg, Huazheng Wang, Qingyun Wu. Divide, Optimize, Merge: Fine-Grained LLM Agent Optimization at Scale.
  EMNLP Findings, 2025

- Chelsi Jain, Yiran Wu, Yifan Zeng, **Jiale Liu**, Zhenwen Shao, Qingyun Wu, Huazheng Wang. SimpleDoc: Multi-Modal Document Understanding with Dual-Cue Page Retrieval and Iterative Refinement.
  EMNLP, 2025

- Linxin Song*, **Jiale Liu***, Jieyu Zhang, Shaokun Zhang, Ao Luo, Shijian Wang, Qingyun Wu, Chi Wang. Adaptive In-conversation Team Building for Language Model Agents.
  Conference on Language Modeling (**COLM**) workshop on AI Agents. Now integrated into AG2 [Blog]

- Shaokun Zhang, Ming Yin, Jieyu Zhang, **Jiale Liu**, et al. Which agent causes task failures and when? on automated failure attribution of llm multi-agent systems
  International Conference on Machine Learning (**ICML Spotlight**), 2025

- Xiaobo Xia, **Jiale Liu**, Shaokun Zhang, Qingyun Wu, Tongliang Liu. Refined Coreset Selection: Towards Minimal Coreset Size under Model Performance Constraints.
  International Conference on Machine Learning (**ICML Spotlight**), 2024

- Shaokun Zhang, Jieyu Zhang, **Jiale Liu**, Linxin Song, Chi Wang, Ranjay Krishna, Qingyun Wu. Offline Training of Language Model Agents with Functions as Learnable Weights
  International Conference on Machine Learning (**ICML**), 2024

- Qingyun Wu, Gagan Bansal, Jieyu Zhang, Yiran Wu, Beibin Li, Erkang Zhu, Li Jiang, Xiaoyun Zhang, Shaokun Zhang, **Jiale Liu**, Ahmed Hassan Awadallah, Ryen W White, Doug Burger, Chi Wang. Autogen: Enabling next-gen llm applications via multi-agent conversation framework.
  ICLR workshop on LLMAgents (**Best paper award**). Conference on Language Modeling (**COLM**), 2024

- Shaokun Zhang, Xiaobo Xia, Zhaoqing Wang, Ling-Hao Chen, **Jiale Liu**, Qingyun Wu, Tongliang Liu. IDEAL: Influence-Driven Selective Annotations Empower In-Context Learners in Large Language Models
  International Conference on Learning Representations (**ICLR**), 2024.

- Xiaobo Xia, **Jiale Liu**, Jun Yu, Xu Shen, Bo Han, Tongliang Liu. Moderate Coreset: A Universal Method of Data Selection for Real-world Data Analysis.
  International Conference on Learning Representations (**ICLR**), 2023.

- Zhenxin Lei*, Wenjing Zhu*, **Jiale Liu***, Cong Hua, Johann Li, Syed Afaq Ali Shah, Liang Zhang, Mohammed Bennamoun, Cuiping Mao. RLAD: A Reliable Hippo-guided Multi-task Model for Alzheimer's Disease Diagnosis.
  IEEE Journal of Biomedical and Health Informatics (**J-BHI**)

- Xudong Guo, Kaixuan Huang, **Jiale Liu**, Wenhui Fan, Natalia Vélez, Qingyun Wu, Huazheng Wang, Thomas L Griffiths, Mengdi Wang. Embodied llm agents learn to cooperate in organized teams
  NeurIPS workshop on Language Gamification, 2024.

PREPRINTS

- Xiaobo Xia, Xiaofeng Liu, **Jiale Liu**, Kuai Fang, Lu Lu, Samet Oymak, William S Currie, Tongliang Liu. Identifying Trustworthiness Challenges in Deep Learning Models for Continental-Scale Water Quality Prediction

EXPERIENCE

- **Adobe Research** — San Jose, CA
  Research Scientist Intern. Mentor: Victor S. Bursztyn, Saayan Mitra — 05/2025 - 08/2025
  Topic: Multi-agent intelligence for creative support.

- **Research Assistant at Penn State** — Remote
  Advisor: Qingyun Wu — 05/2023 - 08/2024
  Topic: Agentic framework AutoGen, AG2; Black-box optimization library FLAML

- **Research Assistant at University of Sydney** — Remote
  Advisor: Tongliang Liu — 06/2022 - 06/2023
  Topic: Data-efficient Machine Learning; Coreset selection

HONORS AND AWARDS

- OpenAI Reseacher Access Grant — 06/2024
- **Chinese National Scholarship**, Ministry of Education of P.R. China — 12/2021
- First Prize Scholarship, Xidian University — 12/2022
- Finalist Winner (First prize), International Mathematical Contest in Modeling — 04/2022
- First Prize in Jiangsu Province, Chinese Physics Olympiad (Rank 66) — 10/2019

SERVICE

- Reviewer for ICML'24 25, ICLR'25 26, NIPS'24 25, CVPR'24, AAAI'26, ARR, ACML'24, AJCAI'24 25, TIST, IJCNN, TMLR, etc.

- Co-creator and maintainer of open source project **AutoGen** (**50k stars**), **AG2** (**3.7k stars**). Maintainer of FLAML (4.2k stars).