

# Peixuan Han

University of Illinois Urbana-Champaign • Illinois, U.S.

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## Education

**University of Illinois Urbana-Champaign**

*Ph.D., Siebel School of Computing and Data Science.*

Illinois, U.S.

2024.8 - Present

- **Advisor:** Prof. [Jiaxuan You](#).
- **Research Interests:** Large language model reasoning and applications in communication.

**Carnegie Mellon University**

*Visiting Student, School of Computer Science*

Pennsylvania, U.S.

2023.6 - 2023.9

**Tsinghua University**

*Undergraduate, Department of Computer Science and Technology.*

Beijing, China

2020.9 - 2024.6

- Attended college at 15.
- **GPA:** 3.91/4.00
- AI-relevant courses: Introduction to AI, Data Structure, Artificial Networks, Information Retrieval.

## Publications

**Peixuan Han**, Adit Krishnan, Gerald Friedland, Jiaxuan You, Chris Kong. [Self-Aligned Reward: Towards Effective and Efficient Reasoners](#).

**Peixuan Han**, Zijia Liu, Jiaxuan You. [ToMAP: Training Opponent-Aware LLM Persuaders with Theory of Mind](#).

**Peixuan Han**, Cheng Qian, Xiusi Chen, Yuji Zhang, Denghui Zhang, Heng Ji. [Internal Activation as the Polar Star for Steering Unsafe LLM Behavior](#) (EMNLP'25).

**Peixuan Han**, Zhenghao Liu, Zhiyuan Liu, Chenyan Xiong. [Enhancing Dense Retrievers' Robustness with Group-level Reweighting](#).

Tao Feng, Haozhen Zhang, **Peixuan Han**, Zijie Lei, Jiaxuan You. [GraphPlanner: Graph-Based Agentic Routing for LLMs](#).

Hongyi Du, Jiaqi Su, Jisen Li, Lijie Ding, Yingxuan Yang, **Peixuan Han**, Xiangru Tang, Kunlun Zhu, Jiaxuan You. [Which LLM Multi-Agent Protocol to Choose?](#)

Alexi Gladstone, Ganesh Nanduru, Md Mofijul Islam, **Peixuan Han**, Hyeonjeong Ha, Aman Chadha, Yilun Du, Heng Ji, Jundong Li, Tariq Iqbal. [Energy-Based Transformers are Scalable Learners and Thinkers](#).

Zijia Liu, **Peixuan Han**, Haofei Yu, Haoru Li, Jiaxuan You. [Time-R1: Towards Comprehensive Temporal Reasoning in LLMs](#).

Xiusi Chen, Shanyong Wang, Cheng Qian, Hongru Wang, **Peixuan Han**, Heng Ji. [DecisionFlow: Advancing Large Language Model as Principled Decision Maker](#) (EMNLP'25).

Kunlun Zhu, Jiaxun Zhang, Ziheng Qi, Nuoxing Shang, Zijia Liu, **Peixuan Han**, Yue Su, Haofei Yu, Jiaxuan You. [SafeScientist: Toward Risk-Aware Scientific Discoveries by LLM Agents](#) (EMNLP'25).

Cheng Qian, **Peixuan Han**, Qinyu Luo, Bingxiang He, Xiusi Chen, Yuji Zhang, Hongyi Du, Jiarui Yao, Xiaocheng Yang, Denghui Zhang, Yunzhu Li, Heng Ji. [EscapeBench: Pushing Language Models to Think Outside the Box](#) (ACL'25).

Yanci Liu, Jiayu Li, **Peixuan Han**, Siyu Ma, Feng Du, Min Zhang. [Emotion and Passage of Time Judgment: Evidence from Weibo Dataset](#).

## Awards

- **Golden Prize**, International Junior Science Olympiad 2018.11
- **First Prize**, Asia-Pacific Informatics Olympiad 2019.5
- **Scholarship for Academic Excellence**, Tsinghua University, 2021.9, 2022.9
- **Scholarship for Social Work**, Tsinghua University, 2022.9
- **Outstanding Graduate of CS Department**, Tsinghua University. 2024.6

## Skills

**English Ability:** TOEFL - Total 119, Reading 30, Writing 30, Listening 30, Speaking 29; GRE - Verbal 164, Quantitative 170, Writing 4.0.

**Programming:** Proficient in Python, C++, SQL. Proficient in data structures and algorithms.

**Deep Learning Framework:** Proficient in PyTorch, Huggingface Transformers, verl.

## Service

- **Teaching Assistant**, Introduction to Artificial Intelligence 2023.9-2024.1
- **Reviewer**, COLING'25 2024.11
- **Reviewer**, KDD'25, Structured Knowledge in LLMs Workshop 2025.4
- **Teaching Assistant**, Data Structure 2025.8-Present