

ZUIJIE LIANG

Personal Page: [\[Google Scholar\]](#) [\[DBLP\]](#) [\[Homepage\]](#) [\[E-mail\]](#) [\[GitHub\]](#) (780+ Stars)

Keywords: LLM(-based) Agents, Knowledge Graph (KG), Continual Learning

EDUCATION

Sun Yat-Sen University (SYSU), China

2019 - 2022

M.S. in Information and Communication Engineering (Recommended)

Wuhan University of Technology (WHUT), China

2015 - 2019

B.Eng. in Communication Engineering

WORK EXPERIENCES

Ant Group

Hangzhou, China

Senior Algorithm Engineer (**A+** offer)

July. 2022 - Present

- R&D on supply chain mining for credit loan business with LLMs, KG, and LLM-based Agents.
- Develop and build one of the largest industrial chain knowledge graphs (cover 40k+ products, 500k relations, 4000kw+ enterprises) with Entity Alignment (Embedding), KG Completion (IE, Relation Reasoning)
- Develop Knowledge-Agent with PAC (Planning, Action, Critic) framework to automate knowledge base construction. Keywords: Synthetic samples, SFT, ToT, RM, Self-refine
- Published 9 papers on 1) **LLMs**: PEFT for Continual Learning, Hallucination, Long-context, Architecture; 2) **LLM-based Agents**: Tool Learning (Using and Making), Reward Modeling; 3) **KG/IE**: Generative Universal IE, Concept Reasoning
- Hosted Ant FinTech AI Challenge (AFAC2023) at [\[TIANCHI\]](#) w.r.t. Financial Information Extraction.

Microsoft

Beijing, China

NLP Research Intern, Supervised by [Huang Hu](#) and Dr. [Daxin Jiang](#)

Oct. 2020 - June 2021

- Research on Generative Chatbot for **Chat with Bing** Project and received Return Offer (SP).
- Published 2 top conference papers (ACL, EMNLP) in Conversational Recommender and Multimodal Chatbot.

Alibaba

Beijing, China

Ads Algorithm Engineer Intern

June 2021 - Sept. 2021

- Optimized automatic Advertising Bidding, mainly focusing on pCVR calibration (ECE ↓30%, AUC ↑15.86%)

Huawei

Shenzhen, China

Software Development Engineer Intern

June 2018 - Aug. 2018

- Development on cell phone troubleshooting detection

PUBLICATIONS (CITATIONS 260+, TOP CONFERENCES 14+)

1. **Zujie Liang**, Weitao Jiang, Haifeng Hu, Jiaying Zhu. "Learning to Contrast the Counterfactual Samples for Robust Visual Question Answering". *EMNLP*, 2020. [\[PDF\]](#) [\[Code\]](#) [\[Slides\]](#) (Citation **130+**)
2. **Zujie Liang**, Huang Hu, Can Xu, Chongyang Tao, Xiubo Geng, Yining Chen, Fan Liang, Daxin Jiang. "Maria: A Visual Experience Powered Conversational Agent". *ACL*, 2021. [\[PDF\]](#) [\[Code\]](#) [\[Slides\]](#)
3. **Zujie Liang**, Huang Hu, Can Xu, Jian Miao, Yingying He, Yining Chen, Xiubo Geng, Fan Liang, Daxin Jiang. "Learning Neural Templates for Recommender Dialogue System". *EMNLP*, 2021. [\[PDF\]](#) [\[Code\]](#)
4. **Zujie Liang**, Haifeng Hu, Jiaying Zhu. "LPF: A Language-Prior Feedback Objective Function for De-biased Visual Question Answering". *SIGIR*, 2021. [\[PDF\]](#) [\[Code\]](#) [\[Slides\]](#)

5. **Zujie Liang**, Fan Liang. “TransPCC: Towards Deep Point Cloud Compression via Transformers”. *ICMR*, 2022. [\[PDF\]](#) [\[Code\]](#)
6. **Zujie Liang**, Feng Wei, Jie Yin, Yuxi Qian, Zhenghong Hao, Bing Han. “Prompts Can Play Lottery Tickets Well: Achieving Lifelong Information Extraction via Lottery Prompt Tuning”. *ACL*, 2023. [\[PDF\]](#)
7. Jingping Liu, Tao Chen (Intern), **Zujie Liang**, et al. “Hierarchical Prompt Tuning for Few-Shot Multi-Task Learning”. *CIKM*, 2023. [\[PDF\]](#)
8. Nianqi Li (Intern), ..., **Zujie Liang**, et al. “CR-LLM: A Dataset and Optimization for Concept Reasoning of Large Language Models”. *ACL Findings*, 2024. [\[PDF\]](#)
9. Wei Shi (Intern), ..., **Zujie Liang**, et al. “Segment+: Long Text Processing with Short-Context Language Models”. *EMNLP*, 2024.
10. Nianqi Li (Intern), ..., **Zujie Liang**, et al. “Past Meets Present: Creating Historical Analogy with Large Language Models”. *COLING (under review)*, 2024.
11. Lida Chen (Intern), **Zujie Liang**, et al. “Teaching Large Language Models to Express Knowledge Boundary from Their Own Signals”. *COLING (under review)*, 2024. [\[PDF\]](#)
12. Baoyue Chai, ..., **Zujie Liang**, et al. “ClusterNet: Heterogeneous Transfer Learning With Clustering Features”. *ICASSP (under review)*, 2025.
13. Jincheng Dai (Intern), **Zujie Liang**, et al. “TriggerGPT: Trigger Token Prediction for Universal Tool Learning”. *AAAI (under review)*, 2025.
14. Wujiang Xu, **Zujie Liang**, et al. “SLMRec: Empowering Small Language Models for Sequential Recommendation”. *ICLR (under review)*, 2025. [\[PDF\]](#)

AWARDS AND HONORS

1. Annually Outstanding Staff of Credit BG, Ant Group, 2024
2. Offered an ACM SIGIR 2021 Student Travel Grant, Canada
2. ICCV 2019 Wider Challenge Track Four, invited for poster demonstration, Rank 5th, Korea [\[leaderboard\]](#)
3. Academic Excellence ScholarShip, SYSU, 2020-2021, China
4. Outstanding Graduate Award, WHUT, 2019, China
5. National University Student Science Contest on Energy Saving & Emission Reduction, 3rd Prize, China

SKILLS

Coding:

Python, C/C++, Linux, Pytorch, Tensorflow, Latex

Languages:

English (Fluent), Cantonese (Native Speaker), Chinese (Native Speaker)

PROFESSIONAL SERVICES

Reviewer: ACL 2024, ARR 2024, ICLR 2023, EACL 2023, ACL 2022, NLPCC 2022/2021, IJCAI 2021