ZHENGXIAO DU

Department of Computer Science and Technology
Tsinghua University, P.R. China

EDUCATION

Tsinghua University *August 2020 - June 2025*
Ph.D. in Computer Science
Advisor: Prof. Jie Tang

Tsinghua University *August 2016 - June 2020*
B.S. in Computer Science
GPA: 3.91/4.00 (Rank 1/158)
Elite Collegiate Award by China Computer Federation (outstanding academic performance and research experience, 73 winners nationwide)
Tsinghua Excellent (Bachelor) Graduate (for top 2% of all the graduates)
Visiting student to Cornell University in 2019

EXPERIENCE

Zhipu AI, Inc January 2023 - Present
Tech Lead *Beijing, China*

· Co-leading the pre-training team of ChatGLM, including pre-training corpus curation, pre-training pipeline design, model architecture, scaling law analysis, evaluation framework, etc. Take part in: ChatGLM, GLM-4, GLM-4.5.
· Developed GLM-4-Voice, an end-to-end speech chatbot that can understand and generate expressive speech in real-time voice conversations (3k stars on Github).
· Developed GLM-4 AllTools, an LLM agent that can browse the web, run python codes, and call user-defined functions, deployed for the ZhiPuQingYan app.
· Built the SFT data for ChatGLM, including prompt filtering, response annotation and data management.
· Implemented and maintained the open-source language model ChatGLM-6B series (accumulating over 63k stars on Github).

Beijing Academy of Artificial Intelligence September 2020 - March 2022
Intern *Beijing, China*

· Designed the GLM pre-training algorithm
· Trained GLM-10B and GLM-10B-Chinese models.

Department of Computer Science, Cornell University Ithaca, USA
Research Assistant to Prof. Thorsten Joachims *Jun 2019 - Oct 2019*

· Designed a learning-to-rank algorithm to learn the ranking policy from implicit feedback with fairness constraints and completed empirical evaluations.

DAMO Academy, Alibaba Group Beijing, China
Research Intern *Sep 2018 - Jun 2019*

· Designed an algorithm for personalized purchase recommendations for customers in different scenarios in the Guess-What-You-Like section on Taobao App

PUBLICATION

* indicates equal contribution.

1. GLM-4.5 Team. "GLM-4.5: Agentic, Reasoning, and Coding (ARC) Foundation Models." arXiv:2508.06471.
2. Aohan Zeng*, **Zhengxiao Du***, Mingdao Liu*, Lei Zhao, Shengmin Jiang, Yuxiao Dong, Jie Tang. "Scaling Speech-Text Pre-training with Synthetic Interleaved Data." International Conference on Learning Representations (ICLR).
3. GLM Team. "ChatGLM: A Family of Large Language Models from GLM-130B to GLM-4 All Tools." arXiv:2406.12793.
4. **Zhengxiao Du**, Aohan Zeng, Yuxiao Dong, Jie Tang. "Understanding Emergent Abilities of Language Models from the Loss Perspective." NeurIPS 2024.
5. Aohan Zeng*, Xiao Liu*, **Zhengxiao Du**, Zihan Wang, Hanyu Lai, Ming Ding, Zhuoyi Yang, Yifan Xu, Wendi Zheng, Xiao Xia, Weng Lam Tam, Zixuan Ma, Yufei Xue, Jidong Zhai, Wenguang Chen, Peng Zhang, Yuxiao Dong, Jie Tang. "GLM-130B: An Open Bilingual Pre-Trained Model." ICLR 2023.
6. **Zhengxiao Du***, Yujie Qian*, Xiao Liu, Ming Ding, Jiezhong Qiu, Zhilin Yang, Jie Tang. "GLM: General Language Model Pretraining with Autoregressive Blank Infilling." Annual Meeting of the Association for Computational Linguistics (ACL), p. 320-335, 2022.
7. **Zhengxiao Du**, Chang Zhou, Jiangchao Yao, Ming Ding, Hongxia Yang, Jie Tang. "CogKR: Cognitive Graph for Multi-hop Knowledge Reasoning." *IEEE Transactions on Knowledge and Data Engineering* (TKDE). 35(2): 1283-1295 (2023)
8. Himank Yadav*, **Zhengxiao Du***, Thorsten Joachims. "Policy-Gradient Training of Fair and Unbiased Ranking Functions." International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), p. 1044-1053, 2021.
9. **Zhengxiao Du**, Jie Tang and Yuhui Ding. "POLAR++: Active One-shot Personalized Article Recommendation." *IEEE Transactions on Knowledge and Data Engineering* (TKDE). 33(6): 2709-2722 (2021)
10. **Zhengxiao Du**, Xiaowei Wang, Hongxia Yang, Jingren Zhou, and Jie Tang. "Sequential Scenario-Specific Meta Learner for Online Recommendation." *SIGKDD Conference on Knowledge Discovery and Data Mining* (KDD), p. 2895-2904, 2019.

ADDITIONAL INFORMATION

Language Skills & Tests

· TOEFL: 109 (Reading 30; Listening 29; Speaking 23; Writing 27)
· GRE: 332 (Verbal 162; Quantitative 170)

Programming Skills

· Languages: Python, Java, C++, C, JavaScript, MATLAB, Bash
· Machine Learning: PyTorch, Tensorflow, Keras, scikit-learn