HETONG WANG

hetong.wang809@gmail.com · https://erikaawang.github.io/

EDUCATION

University of Edinburgh, Edinburgh, UK

MSc in Artificial Intelligence, Nov 2023

Thesis: Probing the dynamics of implicit domain alignment in LLMs advised by Prof. Pasquale Minervini and Prof. Edoardo M. Ponti

University of Liverpool, Liverpool, UK

BSc in Computer Science, Jul 2022

First Class with Honours, Highest Distinction (GPA 4.0/4.0, top 1%)

PUBLICATION

Hetong Wang, Pasquale Minervini, Edoardo Ponti. "Probing the Emergence of Cross-lingual Alignment during LLM Training", In *Findings of the Association for Computational Linguistics*, pp. 12159–12173, **ACL 2024**.

Gabriella Pizzuto, **Hetong Wang**, Hatem Fakhruldeen, Bei Peng, Kevin S. Luck, Andrew I. Cooper. "Accelerating Laboratory Automation Through Robot Skill Learning For Sample Scraping", In *IEEE International Conference on Automation Science and Engineering*, pp. 2103-2110, IEEE CASE 2024.

lacktriangledown Best Healthcare Automation Paper Award.

PROJECTS

Boosting LLM Rewarding through Peer Model Ensembles

Work in progress, advised by Prof. Yulia Tsvetkov

 This project aims to augment feedback signals in both self-training and LLM-as-a-judge settings by leveraging synthetic data generated across an ensemble of LLMs at the 7B parameter scale

Sparse Fine-tuning Towards Multi-tasked Instruction Following

Group Project at University of Edinburgh, Paper

 Proposed an approach to avoid catastrophic forgetting by sparsely tuning the parameters with the largest gradient update. Achieved 20% generalization gain over unseen data compared with full-parameter or random-masked tuning

RESEARCH EXPERIENCE

Research Intern, TsvetShop, University of Washington Nov. 2024 – Present, Supervisor: Prof. Yulia Tsvetkov

Research Intern, THUNLP Lab, Tsinghua University Feb 2024 - Oct 2024, Supervisor: Zhiyuan Liu

Research Assistant, Leverhulme Research Centre, University of Liverpool Jun 2022 - Sep 2022, Supervisor: Gabriella Pizzuto and Andy Cooper

HONORS & AWARDS

Best Healthcare Automation Paper Award, *IEEE CASE*, 2024 British Computer Society Prize, best academic performance in 3rd year, top 1%, 2022 Academic Excellence Award, University of Liverpool £5,400/yr, 2020-2022

SKILLS

Research Skills

- Toolkits: Huggingface, Pytorch, Numpy, Keras, Scikit-learn, OpenAI gym
- HPC Cluster: Slurm, SGE(Sun Grid Engine), Shell, Linux

Programming Python, Java, LATEX, R, C/C++, SQL, HTML