HETONG WANG

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EDUCATION

University of Edinburgh — *Edinburgh, UK*
MSc in Artificial Intelligence — *Sep 2022 – Nov 2023*
Supervisor: Edoardo Ponti and Pasquale Minervini

University of Liverpool — *Liverpool, UK*
BCc with Honours (Highest Distinction) in Computer Science — *Sep 2018 – Jul 2022*
First Class (GPA 4.0/4.0, top 1%), Joint degree with Xi'an Jiaotong-Liverpool University, China

PUBLICATIONS

Probing the Emergence of Cross-lingual Alignment during LLM Training
Hetong Wang, Pasquale Minervini, Edoardo Ponti
The 2024 Annual Meeting of the Association for Computational Linguistics: Findings, **ACL 2024**

Accelerating Laboratory Automation Through Robot Skill Learning For Sample Scraping
Gabriella Pizzuto, Hetong Wang, Hatem Fakhruldeen, Bei Peng, Kevin S. Luck, Andrew I. Cooper
Best Healthcare Automation Paper Award
The IEEE 20th International Conference on Automation Science and Engineering: **IEEE CASE 2024**

EXPERIENCE

TsinghuaNLP Lab, Tsinghua University — *Beijing, China*
Research Assistant in LLM-based Multi-agent Group — *Nov 2023 - Present*
Supervisor: Zhiyuan Liu

Leverhulme Research Centre, University of Liverpool — *Liverpool, UK*
Research Assistant in Robotics and Automation Group — *Jun 2022 - Sep 2022*
Supervisor: Gabriella Pizzuto and Andy Cooper

PROJECTS

Boosting LLM Self-Alignment through Parametric Knowledge Ensemble (Ongoing)

- This project aimed to reach the upper bound of LLM self-alignment capability by leveraging multi-model generation/judgment with minimum external supervision (3k seed data)

Sparse Fine-tuning Towards Multi-tasked Instruction Following [Paper]

- Proposed a parameter-efficient instruct-tuning approach to improve task-specific capabilities of LLMs by masked fine-tuning the parameters with largest gradient update during continue training
- Achieved better zero-shot performance between tasks compared with full or random-masked fine-tuning

HONORS & AWARDS

British Computer Society Prize (best academic performance in 3rd year)
University Academic Excellence Award (highest grade in 1st-2nd year, £5,400/yr)

SKILLS

Programming Python, Java, R, C/C++, SQL, HTML **Tools** LaTeX, Linux, Shell, PyTorch, HPC