## Yuzhen Huang

Email: yhuanghj@cse.ust.hk Homepage: hyz17.github.io

Research Interests: I am primarily focused on large language models, particularly in advancing their reasoning capabilities and multimodal understanding. To achieve this, my research interests lie in: (1) enhancing reasoning and planning abilities through self-improvement and RL techniques, (2) improving the architecture and training methods of multimodal models to strengthen their understanding across multiple modalities and (3) developing reliable evaluation methods for language models.

### EDUCATION

The Hong Kong University of Science and Technology, Hong Kong SAR, China.

Feb. 2024 - present

- Ph.D in Computer Science

- Advisor: Prof. Junxian He

Shanghai Jiao Tong University, Shanghai, China

Sep. 2019 - Jul. 2023

- **B.Eng. in Computer Science** - *GPA*: 3.89/4.3, *Score*: 90.27/100

## RESEARCH PROJECTS

- [1] Compression Represents Intelligence Linearly
  - Investigate the linear correlation between compression and intelligence in LLMs.
  - Provide evidence for the belief that superior compression is indicative of greater intelligence.
  - Propose compression efficiency serves as an unsupervised and reliable metric to assess LLMs' abilities.
  - Conference on Language Modeling (COLM), 2024.
- [2] C-Eval: A Multi-Level Multi-Discipline Chinese Evaluation Suite for Foundation Models
  - The first comprehensive Chinese evaluation suite for LLMs.
  - Conduct a thorough evaluation of the most advanced LLMs.
  - Over 9.8M downloads on Hugging Face and more than 100 models on leaderboard.
  - NeurIPS (Datasets and Benchmarks track), 2023

## **PUBLICATIONS**

#### \* denotes equal contribution

- [1] Y Huang\*, J Zhang\*, Z Shan, J He. Compression Represents Intelligence Linearly
  - Conference on Language Modeling (COLM), 2024.
- [2] Y Huang\*, Y Bai\*, Z Zhu, J Zhang, J Zhang, T Su, J Liu, C Lv, Y Zhang, Y Fu, M Sun, J He. C-Eval: A Multi-Level Multi-Discipline Chinese Evaluation Suite for Foundation Models
  - NeurIPS (Datasets and Benchmarks track), 2023

### Past Employment

Research Intern, Tencent

Nov. 2023 - Jan. 2024

Mentor: Zifei Shan

## Professional Activities

Reviewer: NeurIPS 2024, NLPCC 2024, ICLR 2025

# TEACHING

 $\bf Teaching\ Assistant,$  The Hong Kong University of Science and Technology COMP 5212 Machine Learning

Fall 2024

# STANDARD TESTS

 $\boxed{[1] \ \mathbf{TOEFL} - 102}$