ZONGYI LYU

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🎓 EDUCATION

Harbin Institute of Technology, Shenzhen (HITSZ), Shenzhen, China   Sep 2020 – Present

B.E. in Computer Science

- GPA: 93.051/100, 3.932/4.0
- Scholaship:
  - **National Scholarship (4/523)**
  - **The First-class Academic Scholarship (Top 10 of 523 students)**
  - **Outstanding Student in Harbin Institute of Technology**

ℹ PUBLICATIONS & PREPRINTS

- W. Gu, **Z. Lyu**, Y. Wang, H. Zhang, C. Gao, and Michael R. Lyu, "SPENCER: Self-Adaptive Model Distillation for Efficient Code Retrieval", *2023 IEEE Transactions on Software Engineering(TSE)*, 2023. (Under Review)

👥 RESEARCH EXPERIENCE

Software Analysitics and Reliability Lab, HITSZ   Sep 2022 – Present

Research Assistant   Supervisor: Cuiyun Gao

A Framework with Self-adaptive Model Distillation for Efficient Code Retrieval

- Propose a unified framework which combines both dual-encoder and cross-encoder of the pre-trained model in the task of code retrieval.
- Propose an approach of the model distillation for the dual-encoder, which can greatly reduce the inference time of dual-encoder while retaining the most performance.
- Propose a novel approach for the assistant model selection in the model distillation which can adaptively select the suitable assistant model for different pre-trained models.
- Reduce at least 75% of model parameters while preserving more than 98% retrieval accuracy.

👥 PROJECT EXPERIENCE

Multi-robot Path Planning and Task Allocation Algorithm Design   Feb 2023 – Mar 2023

- Model the real scenario including 4 robots and 7 types of different workbenches in C++.
- Propose a demand-oriented algorithm for task allocation and a collision detection algorithm to avoid collisions between robots.
- Top 15% in Huawei Software Elite Challenge Competition.

Deep learning based Natural language Sentiment Analysis   Mar 2022 – Apr 2022

- Aim to label user comment entity and extract sentiment information from raw review texts.
- Adopt "pycorrector" for data augmentation and pre-trained model for text classification and sequence labeling.
- Top 10% in Paddle's competition "Product review sentiment extraction".

ℹ AWARDS

National Software Engineering "Lan Qiao Cup" Design Contest	*First Prize*	2023
National Software Engineering "Lan Qiao Cup" Design Contest Finals	*Third Prize*	2022
The Chinese Mathematics Competitions	*Second Prize*	2021
FLTRP Cup National English Speech Contest	*Third Prize*	2020 & 2021

⚙ ENGLISH

- IELTS: 7.0 (L8 R8 W6.5 S6)
- CET6: 559