何震宇 Zhenyu He

UESTC ｜ zhenyu.h@outlook.com

Blog: https://hzy-hzy.github.io

Education

University of Electronic Science and Technology of China	Sep 2019 - Jun 2023
School of Software Engineering	Chengdu, China

Major: Software Engineering (Elite Program)

GPA: 3.99/4 , 90+/100   **IELTS**: 7

Courses: CS224n, CS224w, CS231n, CS229, Information theory and Entropy, Calculus I/II(93/96), Linear Algebra(93), Program Design and Algorithm Foundation I/II(100/100), Probability and Mathematical Statistics(93), Physics(94), Discrete Mathematics(92)

Publication

Rumor Detection on Social Media with Event Augmentations , SIGIR 2021

Zhenyu He, Ce Li, Fan Zhou, Yi Yang

Two fourth-authored NeurIPS paper in submission

Research Experience

Research Intern, DP Technology	Jun 2022 - Present
Mentor: Guolin Ke	Beijing, China

Working on AI for protein.

Research Intern, Machine Learning Group, MSRA	Mar 2022 - Jun 2022
Mentor: Lijun Wu	Beijing, China

- Working on Drug AI
- Introduce prompt tuning to molecule transformer.
- Introduce Pulearning techniques such as Mixup to Drug-Drug interactions.

KEG, Tsinghua University	Jul 2021 - Jan 2022
Advisor: Jie Tang; Mentor: Xiao Liu	Beijing, China

- Worked closely with senior Ruixiao Yang on a project called "Language Model as Wikipedia". We aimed to make Language Model as knowledgeable as Wikipedia and tried many techniques. We tested performance on downstream Question-Context retrieval task and found that the top 2 retrieval accuracy of our radical method can be comparable to the top 1 retrieval accuracy of DPR. More details about this project can be found in our meeting document.

- Working closely with postgraduate Xiao Liu on a project called "Never Ending Language World Knowledge Learning System". We aim to build a life-long learning system acquiring world knowledge. This project is a relatively huge project and more people are participating in it. As for my part, which is the extractor part, I reimplement the Prompt-Learning techniques on Language Models and train hundreds of continuous prompts for different relation extraction datasets. When conducting inference, I use some techniques to aggregate hundreds of prompts model as a joint model, so that the model can extract all relations of a given context by only one "forward step". Project website **https://wudao.aminer.cn/newkg/**

CoAI, Tsinghua University (remote)	Apr 2021 - May 2021
Advisor: Prof.Minlie Huang	Beijing, China

- Worked closely with postgraduate Runze Liang and Senior Wenchang Ma on conversational AI.
- Read some papers about conversational AI.
- Starting from scratch, I devoted time to learning HTML, CSS, Javascript, and some basic knowledge of Vue. After 1~2 weeks, I successfully made a simple conversation page, using node.js as backend.

ICDM, University of Electronic Science and Technology of China	Nov 2020 - Jun 2021
Advisor: Prof.Fan Zhou	Chengdu, China

- Did research on rumor detection on social media and read many papers about this field.

- Read many papers about graph neural networks and contrastive learning.
- Proposed data augmentation strategies and integrated contrastive learning to achieve label-efficient learning in rumor detection. **A first-author SIGIR short paper was accepted**.

KE Lab, University of Electronic Science and Technology of China   Jul 2020 - Oct 2020

Advisor: Prof.Qiao Liu   Chengdu, China

- Did some research on session-based recommendation systems.
- Reproduced some models such as GRU, STAMP, and SR-GNN.

Work Experience

Applied Scientist Intern, Social Computing Group, Microsoft   Jan 2022 - Feb 2022

Mentor: Fangzhao Wu   Beijing, China

- Worked as a machine learning engineer to improve the performance of recommendations, advertising, and searching.
- Working on a research project about the exploit and exploration problem with Mengyan Zhang.

Awards and Scholarship

- SIGIR Student Travel Grant   2021
- The First Prize Scholarship   2020
- Midea Enterprise Scholarship   2020

Skills

- **Programming Language**   Python, C, basic Java/HTML/CSS
- **Deep Learning Framework**   Pytorch
- **Miscellaneous**   Latex, SQL, Markdown