ZHAOYE FEI

2005 Songhu Rd.◇ Shanghai ◇ China 200438
(+86) 13375710430 ◇ zyfei20@fudan.edu.cn

EDUCATION

Fudan University *September 2020 - Present*
Master student in Computer Science & Engineering Shanghai, China
School of Computer Science
Member of FudanNLP Group
Advisor: Prof. Xipeng Qiu

HangZhou Dianzi University *September 2016 - June 2020*
B.E. in Information Security Hangzhou, China
School of Cyberspace Security
Member of Vidar Team
GPA: Top 15%

INTERSHIP

HUAWEI, Inc *July 2020 - Present*
Intern *Hangzhou, China*

- Explore efficient sparsely activated pre-training techniques.
- Participate the project of SHP (A IR-oriented pre-trained language model based on symmetric hyperlink prediction), this paper has submitted to SIGIR 2022.
- Assist the Mindspore team to develop the sparsely activated feature.
- Develop the SAM (A efficient sparsely activated model based on hierarchical routing mechanism) based on Mindspore. Compared with the dense model with the same performance, the QPS can be improved by 5 times. The code and model will be released in ModelZoo in the future, and the paper has submitted to ijcai2022.

RESEARCH EXPERIMENT

FastMatching *September 2020 - December 2020*
https://github.com/ngc7292/fastMatching/tree/v1

- FastMatching is a project which collected some datasets and developed some models (ESIM, BERT, DC-BERT, ColBERT etc.) in text-matching task and based on FastNLP and Pytorch.
- V2 is developing and will release soon.

Short Text Semantic Matching of Xiaobu Assistant Dialogue *Match 2021 - June 2021*
https://github.com/ngc7292/tianchi-oppo-matching

- I implement the short text matching pipeline for desensitised text and get the 30/5346 in track 1 and 61/5346 in track 2.
- We combine the results from multiple models (Like BERT, NEZHA etc.), pre-trained on the desensitised data and fine-tuned on downstream task datasets. In the pre-training stage, we use adversarial learning and various pre-training tasks to improve the language modeling ability of the model. In the end, we achieved 93% accuracy on the test set.

MindMoE *June 2021 - January 2022*
https://arxiv.org/pdf/2110.07431.pdf

- Explore an efficient sparse routing mechanism, which improves QPS by 5 times compared to the dense model with the same effect.
- Assist the Mindspore team to develop and improve distributed computing operators.

PUBLICATIONS

Towards More Effective and Economic Sparsely-Activated Model.
Hao Jiang*, Ke Zhan*, Jianwei Qu*, Yongkang Wu*, **Zhaoye Fei***, Xinyu Zhang, Lei Chen, Zhicheng Dou, Xipeng Qiu, Zikai Guo, Ruofei Lai, Jiawen Wu, Enrui Hu, Yinxia Zhang, Yantao Jia, Fan Yu, Zhao Cao
arXiv 2110.07431

HONORS & AWARDS

National Encouragement scholarship (three times) *2017 - 2019*

Second Prize in 11th National College Student Information Security Contest *September 2018*

Second Prize in 2017-2018 Information Security Triathlon *2017 - 2018*

The Second Prize Scholarship of Hangzhou Dianzi University (three times) *2016 - 2020*

other prize in some information security Competition is hosted by some other companies.