Jindong Cao | (+1) 412 606 3179, jindongc@andrew.cmu.edu, https://www.linkedin.com/in/jindong-cao-9a526b252/

EDUCATION

College of Engineering, Carnegie Mellon University (CMU) Pittsburgh, PA
Master, Electrical and Computer Engineering Dec. 2024

School of Computer Science and Engineering, Sun Yat-sen University (SYSU) Guangzhou, China
Bachelor, Computer Science and Technology; **GPA:** 3.9/4.0 July 2023
Courses: C++ Programming, Data Structure and Algorithm, Fundamental of Computer System, Computer Network, Database System Concepts, Natural Language Processing, Speech Recognition

PRIZE

"Challenge Cup" Competition of Science and Technology Guangzhou, China
National First Prize (130/300,000) May 2022

SYSU ACM School Competition Guangzhou, China
First Prize (10/300) Oct. 2021

INTERNSHIP EXPERIENCE

ZMO.AI | *Python, PyTorch, LLM, Model Pruning and Quantization* Sacramento, United States
Machine Learning Engineer Intern Feb. 2023 - June 2023

- Developed an AI tool for image editing, significantly enhancing the quality of image editing tasks.
- Integrated multiple advanced AI models, including ChatGPT, Segment Anything Model (SAM), Grounding-Dino, and Stable Diffusion, to achieve high-quality image editing results, enabling the image to be more realistic.
- Implemented model pruning on Blip2 and CLIP models, optimizing their efficiency, reduced memory usage by 30%, reduced average runtime by 40%.

Huawei Technologies Co., Ltd. | *C++, Data Structure* Dongguan, China
Software Development Engineer Intern July 2022 - Sep. 2022

- Completed the refactoring of a data center that significantly improved its operational efficiency, reduced the average query time by 70%.
- Designed more appropriate data structures by specifically analyzing the application scenarios, reducing the query time complexity of the data center. Wrote automation test code for future code updates and maintenance.

RESEARCH EXPERIENCES

National Supercomputer Center in Guangzhou | *PyTorch, CLIP, Transformer* Guangzhou, China
Co-First Author Oct. 2022 - May 2023

- Co-authored a research paper《*Exploring Low-Resource Medical Image Classification with Weakly Supervised Prompt Learning*》, which was submitted to《*Pattern Recognition*》. Took a leading role in the design and execution of experiments, as well as partial writing of the research paper.
- Leveraged the transferable representation capabilities of large-scale pre-trained vision-language models to alleviate the low-resource problem in medical images classification supporting clinical auxiliary diagnosis.
- By introducing additional structures for zero-shot and few-shot learning prompt embedding, the model's classification ability is enhanced.

OTHERS

Skills: C++, Python, Matlab, Pytorch, Latex, Linux, Data Structure, Algorithm, Machine Learning

Language: Proficient in English; Native in Chinese