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OBJECTIVE

An experienced deep learning (DL) researcher with extensive academic, practical knowledge and high-impact publications. Specialization in medical image analysis for segmentation & multimodal learning, with extensive understanding of architectural and training paradigms. Actively looking for opportunities as a ML/DL researcher or Data Scientist.

EDUCATION

Harbin Institute of Technology
M.Sc., Biomedical Engineering

Sep. 2023 – Present
Harbin, China

Dongguang University of Technology
B.Eng., Computer Science and Technology

Sep. 2018 – Jun. 2022
Dongguang, China

PUBLICATIONS

- **Wei, M.**, Chen, S., Wu, S., & Xu, D. (2024).Rep-MedSAM: Towards Real-time and Universal Medical Image Segmentation. (CVPR 2024 Workshop: Segment Anything In Medical Images On Laptop.)

RESEARCH EXPERIENCE

CVPR 2024 Challenge: Segment Anything In Medical Images On Laptop
Leader

May. 2024 – Jun. 2024

- Proposed an efficient knowledge distillation framework and achieved great results on the validation set after distillation.
- Adapted lightweight architectures for the resource-limited environment to promote model inference speed by almost $2\times$ for semantic segmentation in medical images.
- Increased inference speed for 3D volume with multi-object $2\times$ by caching in slices.
- Curated over 10 datasets across different modalities.

CONFERENCE ACTIVITY

CVPR 2024 Workshop on Foundation Models For Medical Vision

- Oral presentation for summary of our method and results analysis for the challenge.

SKILLS

Programming Language: Python, C/C++, L^AT_EX, Markdown

ML/DL: PyTorch, NumPy, Pandas, Scikit-Learn

Tools: Linux, Git, Docker, OpenCV, SimpleITK

Relevant Courses: Artificial Intelligence and Its Application, Machine Learning Theory and Algorithms, Advanced Pattern Recognition Technique, Biological Big Data Analysis

Language: Chinese, English