JIANGYIN ZHOU

Beijing University of Posts and Telecommunications
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EDUCATION

M.Sc. in Intelligent Science and Technology (Research)   Beijing, Chinese mainland, Sept. 2022 – June 2025

Peking University of Posts and Telecommunications

Supervisor:	Prof. Yong Liu
Field of Study:	AI for medical image analysis
Thesis Topic:	Research and implementation of prognostic diagnosis system for heart transplant patients based on machine learning
Major Courses:	Information Search and Artificial Intelligence, Matrix Analysis, Advanced Machine Learning, Probability and Stochastic Processes
GPA:	3.72 / 4.0

B.S. in Automation   Beijing, Chinese mainland, Sept. 2018 – June 2022

Peking University of Posts and Telecommunications

Thesis Topic:	Visual simulation and application of multi-UAV cooperative control algorithm
Major Courses:	Classic Control Theory, Analog Fundamentals, Digital Electronic Circuits
GPA:	3.46 / 4.0

PUBLICATIONS

* Corresponding author

EMBC 2024   Exploring the Feasibility of Investigating Myocarditis Progression Using Histopathological Features from Whole-Slide Images of H&E Tissue

Jiangyin Zhou, Congrui Wang, Xiumeng Hua, Jiangping Song, Yong Liu and Rui Hou*; Accepted manuscript.

RESEARCH EXPERIENCE

- *Cell Nuclei Segmentation on H&E images*   *Beijing, China*

    Based on Segment Anything, LoRA fine-tuning is used, a U-Net-like structure is used as a prompt module, and the mask decoder is regarded as a segmentation refinement module. This approach improved the model's F1 score by 1.42 compared to other segmentation- Anything models on the TNBC dataset.

- *Modern smart healthcare system serving border guards*   *Beijing, China*

    Led the development of App, overseeing all stages from inception to deployment. Orchestrated the implementation of the natural language dialogue robot. Coordinated team efforts and reported progress.

AWARDS AND HONORS

- First Prize University scholarship, Peking University of Posts and Telecommunications   2023
- First Prize at School Level in The 9th "Internet+" Innovation and Entrepreneurship Competition   2023
- Second Prize university scholarship, Peking University of Posts and Telecommunications   2022

SKILLS AND EXPERTISE

Skills

- Programming: Python (PyTorch, NumPy, Pandas, Scikit-learn, etc.), C++;
- Machine Learning: CNNs, ViTs, GPT, LoRA, DDPM;
- Operating Systems: Linux, SLURM;

Teaching

- Basics of brain and cognitive science (TA)   Spring 2024

ONGOING LEARNING

- Generative Visual Question Answering, BLIP-2, GLaMM, LISA;