JIANGYIN ZHOU

Beijing University of Posts and Telecommunications jiangyinzhou0309@gmail.com

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: 3.44 / 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

• <u>Cell Nuclei Segmentation on H&E images</u>

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;