Qingqiao Hu

Address: University of California, Los Angeles (UCLA)
Personal Website: Winston Hu (winstonhutiger.github.io)

EDUCATION

UCLA, Los Angeles, California, U.S. 09/2022 - 12/2023

- Degree: Master of Science
- Major: Electrical and Computer Engineering; Overall GPA: 3.88/4.0

Southern University of Science and Technology (SUSTech), Shenzhen, China 09/2017 - 06/2021

- Degree: Bachelor of Engineering
- Major: Computer Science; Overall GPA: 3.66/4.0
- Honors & Awards: 2nd Place Academic Scholarship in 2018; 3rd Place Academic Scholarship in 2020

PUBLICATION

Hu, Q., Li, H., & Zhang, J. (2022, September). Domain-adaptive 3D medical image synthesis: An efficient unsupervised approach. In *International Conference on Medical Image Computing and Computer-Assisted Intervention* (pp. 495-504). Cham: Springer Nature Switzerland.

PREPRINT

Hu, Q., Wang, H., Luo, J., Luo, Y., Zhangg, Z., Kirschke, J. S., ... & Li, H. B. (2023). Inter-Rater Uncertainty Quantification in Medical Image Segmentation via Rater-Specific Bayesian Neural Networks. *arXiv preprint arXiv:2306.16556*, submitted to Medical Imaging Analysis 2023

RESEARCH EXPERIENCE

***Remote Research Intern*, VLAA Lab, UCSC** 04/2023 - present

- Conducted research related to unsupervised/weakly supervised segmentation task learning from synthetic dataset
- Explored the possibility of a diffusion model to generate high-quality synthesis dataset.

***Research Assistant*, CVIP Lab, Southern University of Science and Technology** 09/2020 - 06/2021

- Conducted research related to multi-rater uncertainty in medical image segmentation under the supervision of Prof. Jianguo Zhang
- Implemented a model of shared-encoder-multiple-decoder structure to capture the uncertainty of multiple annotations from different raters
- Utilized the data from QUBIQ challenge to demonstrate that our model performed much better than other SOTA models
- Summarized the research results and completed the bachelor thesis paper under supervision of Prof. Zhang
- Modified the research results and submitted our work to Medical Imaging Analysis

WORKING EXPERIENCE

***Research Assistant,* Prof. Jin Zhang's Lab, Southern University of Science and Technology** 07/2021 - 01/2022

- Conducted research related to human activity recognition using FMCW radar
- Implemented a few-shot learning model with limited amount of radar data to classify data from unseen classes

- Used a cross-domain technique with a few collected and labeled data to adapt the model to a new environment

***Internship*, Sino Smart, Shenzhen** 01/2021 - 02/2021

- Worked as an intern in Sino Smart, Shenzhen
- Implemented an algorithm to detect the X-ray images of SMT materials plates based on the constraints of position information

ADDITIONAL INFORMATION

- Programming Skills: Python, Pytorch
- Research Skills: Latex