

Qingqiao Hu

Address: University of California, Los Angeles (UCLA)
Personal Website: [Winston Hu \(winstonhutiger.github.io\)](https://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., Zhang, 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

Research Assistant, Complex Network Group, UCLA 09/2022 - present

- Conducted research related to tooth segmentation and detection to facilitate plaque detection
- Helped collect data in Dr. Vivek Shetty's research lab in UCLA Dentistry School
- Developed and implemented tooth segmentation model to remove gums
- Developed color-based methods to detect the plaque area

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