Xianghui Yang

TEL:	0475921923
Email:	xianghui.yang@sydney.edu.au
Nationality:	Chinese (People's Republic of China)

PUBLICATIONS

1. **Xianghui Yang**, Bairun Wang, Kaige Chen, Xinchi Zhou, Shuai Yi, Wanli Ouyang, Luping Zhou. "Brinet: Towards bridging the intra-class and inter-class gaps in one-shot segmentation." British Machine Vision Conference (BMVC Oral). 2020.
2. **Xianghui Yang**, Guosheng Lin, and Luping Zhou. "ZeroMesh: Zero-shot Single-view 3D Mesh Reconstruction." arXiv preprint arXiv:2208.02676 (2022). (Under Review)
3. **Xianghui Yang**, Guosheng Lin, and Luping Zhou. "Neural Vector Fields: Implicit Representation by Explicit Learning." The Conference on Computer Vision and Pattern Recognition (CVPR). 2023.

EMPLOYMENT EXPERIENCES

2020.01 – 2020.04 Research Assistant (Part-time), The University of Sydney, Australia

- Project: Pill Image Recognition
- Target: Build an automated system to help patients recognize pills.
- Main Duties: Data collection, processing and analysis, system establish.

2020.02 – 2020.07 Teaching Assistant (Part-time), The University of Sydney, Australia

- Course: Predictive Analytics
- Main Duties: Coding Assistant, answer students' questions.

EDUCATION EXPERIENCES

2012.09 – 2015.06 The Middle School Attached to Northwestern Polytechnical University, Xi'an, Shaanxi Province, China

2015.09 – 2019.06 BSc (Physics Specialty) Program, Nanjing University, China

- Compulsory GPA: 4.48/5.0 (89.6/100)
- Overall GPA: 4.41/5.0 (88.2/100)
- RANK: 30/144

2019.10 – Present PhD Program, The University of Sydney, Australia

- Supervised by Dr. Luping Zhou and Dr. Wanli Ouyang

PROJECTS

2018.03 – 2018.07 Throat Disease Recognition

- Advisor: A.P. Tong Lin, Peking University
- This project applies deep learning to diagnose throat reflux and aims to address the issue of inaccurate empirical testing and reduce patient discomfort during the PH test, with limited data.

2020.01 – 2020.04 Pill Image Recognition

- Advisor: A.P. Luping Zhou, The University of Sydney
- This project involves the collection of pill image data from the internet using spiders and the development of a CNN-based model to automatically recognize pills from images. The goal is to provide a helpful tool for patients to identify pills based on images.

2022.6 – Present Crohn's disease ulcers Detection

- Advisor: A.P. Luping Zhou, Dr. Aravind Gokul Tamilarasan, The University of Sydney
- We collected 1158 capsule endoscopy images from 10 patients diagnosed with Crohn's disease and labeled by a gastroenterologist as either normal or ulcerated. A CNN-based model was developed to detect small bowel Crohn's disease ulcers and erosions and achieved a high accuracy of 98.4% with a sensitivity of 97.8% and specificity of 100%.

AWARDS AND SCHOLARSHIPS

- 2016 People Scholarships issued by Nanjing University
- 2017 MCM/ACM Honorable Mention issued by the Consortium for Mathematics and Its Application
- 2017 People Scholarships issued by Nanjing University
- 2017 Xingquan Responsibility for Scholarships issued by Nanjing University
- 2016-2017 Outstanding Student Award issued by Nanjing University
- 2018 Excellent Member of the Communist Youth League issued by Nanjing University
- 2018 People Scholarships issued by Nanjing University
- 2017-2018 Outstanding Student Award issued by Nanjing University
- 2019 Outstanding Graduates issued by Nanjing University

SKILLS

- Language: Python, C/C++, Matlab, Java
- Framework: Pytorch, Tensorflow, Blender

RESEARCH INTERESTS

- 3D Reconstruction
- Few-shot Learning

- Surface Reconstruction