Wenhua Zhang

wenhualaugh@163.com (+86) 153-7196-9073

Education

2017 – Now **Ph. D. in Computer Science, The University of Hong Kong**

· Research interest: Machine learning; Medical image analysis; Geometric computation

· Supervisor: Prof. Wenping Wang (IEEE Fellow & ACM Fellow), Prof. Jia Pan

2013 – 2017 **Bachelor in Computer Science (Talent Base Class), Shandong University**

· Score: 92.39/100

· Ranking: 1/30

Work Experience

2020.11 – Now **AI Researcher (Intern),** Tencent

· Mentor: Dr. Jun Zhang

· Main Work:

(1) We design a self-supervised framework to learn informative representations for nucleus classification. Our model outperforms the state-of-the-art method by 4 points on accuracy on dataset PanNuke.

(2) We propose a nucleus classification framework that can make full use of multiple nucleus datasets. Our model outperforms the state-of-the-art method by 7 points on accuracy on dataset CoNSeP.

Research Experience

W. Zhang, J. Zhang, S. Yang, et al, "Knowledge-based representation learning for nucleus instance classification from histopathological images", IEEE Transactions on Medical Imaging, 2022. (Accepted)

Top journal in medical image analysis, impact factor: 11.037

W. Zhang, Y. Yue, H. Pan, et al, "Marching windows: Scalable mesh generation for volumetric data with multiple materials", IEEE Transactions on Visualization and Computer Graphics. (In minor revision)

Top journal in visualization, impact factor: 5.226

W. Zhang, J. Zhang, S. Yang, et al, "Merging nucleus datasets by correlation-based cross-training", Medical Image Analysis. (In major revision)

Top journal in medical image analysis, impact factor: 13.828

W. Zhang, M. Luo, K. Tian, et al, "Interpretable Cross-modal Knowledge Graph: A General Representation for Digital Pathology Applications", Pathology. (Submited)

Journal in medical image analysis, impact factor: 5.335

W. Zhang, X. Wang, S. Yang, et al, "Ensemble Improved HoVer-Net for Simultaneous Nucleus Segmentation and Classification", Journal of Biomedical and Health Informatics. (Submited)

Journal in medical image analysis, impact factor: 7.021

Challenge Experience

2022 **CoNIC 2022 Challenge** (The **only** member in team Pathology AI)

· Nuclear segmentation and classification: 3/96

· Nuclear composition prediction: 1/96

Projects

2021-2022 Mitochondria Classification

· Identity the needs of the students and professor in Shanghai Jiaotong University

· Implement related segmentation and classification algorithms

· Analyze the data and support the paper writing

2017 Carbot Android APP

· Write code for the Android control app for the 3D-printed Carbot individually

· Write the related tutorials and demonstrate the project

Skills

Frequent User Python, C++, Ubuntu

Familiar Pytorch, CGAL, OpenGL, ROS, Blender, Openslide, Latex

Awards & Honor

2017 **Y S and Christabel Lung Postgraduate Scholarship For Engineering Students**

Postgraduate Scholarship

2016 **The CCF Elite Collegiate Award**

2014&2015 **National Scholarship**