Youcheng Li, Ph.D. Candidate

Summary

I am an PhD candidate at School of Intelligence and Science Thechnology of Peking University, supervised by Prof. Liwei Wang. I am interested in the application of machine learning, especially computer vision in the field of biomedical engineering. Please see my personal website for an overview. My mission: develop an artificial intelligence medical diagnosis system for social good.

Work Experience

Research Assistant

Nov 2022 - May 2023

I joined Professor Liwei Wang's research group at Peking University in November 2022. During my sixmonth internship, I focused on developing algorithms for breast ultrasound video detection. My research work primarily revolved around addressing key challenges in this field. Through an extensive review of existing literature, I proposed innovative approaches and methodologies that significantly advanced the state-of-the-art. As a result of my research efforts, I successfully published a paper at MICCAI 2023, a prestigious conference in the field of medical image analysis. This achievement highlights the novel contributions and impact of my work in the scientific community.

Research Assistant Jan 2022 - Jan 2023

During my one-year online internship under Professor Pingzhao Hu at Western University in Canada, I focused on studying the cell segmentation algorithm of spatial transcriptomics. I proposed a novel segmentation method using multi-scale manifold learning, which led to my publication as the first author in the Joint Statistical Meeting. My internship was supported by both the China Scholarship Council and Mitacs International Intern Scholarship.

Research Assistant Jan 2021 - May 2023

During my two-year internship under Professor Xue Jianru at Xi'an Jiaotong University, I focused on solving the cross-view geometric positioning problem in autonomous driving. Through a comprehensive review of previous work, I proposed a novel learning paradigm and achieved significant results, publishing two first-author papers in the process.

Embedded Engineer Assistant

July 2020 - Sept 2020

Completed a two-month internship as an embedded engineer assistant in the hardware department of Shenzhen Anke High-tech Co., LTD, a medical device company. Gained valuable experience working on advanced medical devices and learning from professionals in the field during the internship from July to September 2020. Contributed to the development of cutting-edge medical technologies and was grateful for the opportunity to work with the talented team at Shenzhen Anke High-tech Co., LTD.

Projects and Talks

My Teaching and Talks

See my personal website for more details.

EDUCATION AND SCHOLARSHIP

2023 - present	Ph.D. at Peking University	(GPA: -/4.0)
2019 - 2023	Bachelor's Degree at Xi'an Jiaotong University	(GPA: 4.0/4.3)
2021 - 2022	Zheng Guobin Scholarship	(top 3%)
2020 - 2021	MEGVII Scholarship	(top 3%)
2020 - 2021	Mitacs Globalink Research Internship Award	(top 1%)
2020 - 2021	China Scholarship Council Award	(top 1%)
2019 - 2020	National Scholarship	(top 1%)

PUBLICATIONS

Haojun Yu, **Youcheng Li**, QuanLin Wu, Ziwei Zhao, Dengbo Chen, Dong Wang, Liwei Wang, Mining Negative Temporal Contexts For False Positive Suppression In Real-Time Ultrasound Lesion Detection