

# Yanming Xiu

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## EDUCATION

Aug 2022 — Present	Ph.D. in Electrical and Computer Engineering, Duke University	Durham, NC, USA
Aug 2018 — Jun 2022	Bachelor of Engineering in Automation (Robotics Concentration)), Zhejiang University	Hangzhou, Zhejiang, China
	<ul style="list-style-type: none"><li>• GPA: 3.85/4.0</li><li>• Rank: Top 15%</li><li>• Awards: Outstanding Graduates of Zhejiang University (2022); Zhejiang University First Scholarship (2021); Academic Excellent Reward (2021)</li><li>• Core Courses: Computer Vision, Robotics, Machine Learning, Embedded Systems, Control Theory</li></ul>	

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## RESEARCH INTERESTS

### Computer Vision

Computer Vision, 3D-Reconstruction, Medical Imaging

### Machine Learning

Deep Learning, Supervised Machine Learning

### Robotics

UAV, Robotic Arms

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## RESEARCH PROJECTS

Jan 2023 — Present	MRI Data Harmonization	Duke University
	Advisor: Dr. Yun Wang	
	<ul style="list-style-type: none"><li>• Adapted Cycle GAN model to 3D version for MRI data harmonization</li><li>• Used other models such as PTNet-3D for MRI harmonization</li><li>• Tested the harmonization quality by doing brain segmentation</li></ul>	
Nov 2022 — Jun 2023	Hypothalamus Segmentation with Deep Learning	Duke University
	Advisor: Dr. Yun Wang	
	<ul style="list-style-type: none"><li>• Collected and organized a hypothalamus MRI dataset;</li><li>• Applied deep learning framework such as ResNet and UNet to hypothalamus segmentation task</li></ul>	
Sep 2021 — Jan 2022	HRNet based Clothes Landmark Detection and Clothes Folding Robots	University of Hong Kong (Remote), Zhejiang University
	Advisor: Prof. Wenping Wang (HKU), Prof. Yiping Feng (ZJU)	
	Award: Outstanding Student Research Project of Zhejiang University (Third Prize)	
	<ul style="list-style-type: none"><li>• Used HRNet for clothes landmarks detection by predicting the location of key-points</li><li>• Applied the detecting system to robotic arm, and test with images obtained directly by the robot</li><li>• Programmed the robotic arm to perform clothes folding</li></ul>	
Sep 2021 — Nov 2021	Establishing dataset of videos and corpus	University of Hong Kong (remote))
	Advisor: Prof. Wenping Wang	
	<ul style="list-style-type: none"><li>• Recorded videos of simple objects in a simulation robotics system (CoppeliaSim)</li><li>• Manually generated descriptive text and key frame information data to describe the position of objects.</li></ul>	

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SKILLS	Programming Languages			
	Python, Matlab, Bash, LaTeX			
	Frameworks and Tools:			
	PyTorch, Numpy, Jupyter Notebook, Nibabel, Freesurfer, FSL, ROS, Docker			
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LANGUAGES	English	Good working knowledge	Chinese (Mandarin)	Native speaker
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LEADERSHIP AND EXTRA-CURRICULAR ACTIVITIES				
Aug 2019 — Jan 2020	Undergraduate Teaching Assistant in Modern Chinese History			Zhejiang University
Mar 2019 — Jul 2019	Leader of Tug-of-War Team			Zhejiang University
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HOBBIES	Fitness Body Building; Self-driving Trip; Cooking			