

Xiaoyan Cong

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Education

BS in Robotics Engineering

Chu Kochen Honors College, Zhejiang University, Hangzhou China

GPA 3.97/4.00

Sep. 2020 - Present

Minor in Mathematics

School of Mathematical Sciences, Zhejiang University, Hangzhou China

Sep. 2021 - Present

Minor in "AI+X" Micro-Major

Established by Zhejiang University, Fudan University, University of Science and Technology of China, Shanghai Jiaotong University, Nanjing University and Tongji University, Huawei, Baidu and SenseTime under the organization of the Teaching Collaboration Center of the Five Universities in East China.

Feb. 2021 - Present

Exchange Student

School of Engineering, The Hong Kong University of Science and Technology, Hong Kong China

Feb. 2023 - June. 2023

Research Experiences

Research on 3D Computer Vision and Computer Graphics

I'm exploring an implicit representation for deformable objects reconstruction from a monocular RGB-D camera. One submission(first author) is expected to be coming soon.

Mentor: Prof. Qixing Huang

June. 2023 - Present

Research on Computer Vision

Guided by Prof. Chenyang Lei, I'm exploring a novel *diffusion-based* approach for automatic image colorization given black-and-white images by imitating the imagination process of human experts. One submission(first author) is expected to be coming soon.

Mentor: Prof. Qifeng Chen

March. 2023 - Present

Research on 3D reconstruction and novel view synthesis

Guided by Sida Peng and Bojian Wu, I am exploring how to accurately reconstruct the geometry and generate high-quality novel view images of refractive and reflective objects(e.g. transparent objects) by making use of neural implicit 3D representations and differentiable rendering.

Mentor: Prof. Xiaowei Zhou

Oct. 2022 - Feb. 2023

Research on Autonomous Driving: Detection and Tracking of Millimeter Wave Radar

Advised by Prof. Rong Xiong and Prof. Yue Wang, I have finished the Deep Scientific Research Training Program of Chu Kochen Honors College on "Detection and Tracking of Millimeter Wave Radar", which is awarded as excellent (10 in total). The project focused on exploring how to combine vision sensors(RGB camera) and millimeter-wave radars to increase the accuracy of object detection.

Mentor: Prof. Rong Xiong

Feb. 2022 - June. 2022

Research on Deep Learning: Cross-domain Performance Evaluation Method

Advised by Prof. Jiang Wei, I am participating in a Student Research Training Program(SRTP) on "Cross-domain performance evaluation method of pedestrian re-identification model based on model parameter distribution", focusing on exploring the relationship between data domain(original & target) and model parameters, realizing online evaluation of model performance, and laying a foundation for the further online model update.

Mentor: Prof. Wei Jiang

June. 2022 - Jan. 2023

Awards and Honors

2020-2021	Scholarship: China National Scholarship (by Ministry of Education of China, Top 0.2%)
2021-2022	Scholarship: Scholarship for Excellence (by CKC Honors College, Top 1%)
2020-2022	Scholarship: First Prize Scholarship of Zhejiang University
2020-2021	Scholarship: Chu Kochen Honor College Leading Scholarship of Zhejiang University
2021-2022	Scholarship: Zhejiang Provincial Government Scholarship
2021-2022	Scholarship: Phoenix Special Scholarship
Nov. 2021	Contest: first prize: Zhejiang Province in the 13th National College Students Mathematics Competition

Technical Skills

Programming	C/C++, Python(Pytorch), Markdown, Lingo, Matlab
Professional Softwares	Linux, Simulink, Multisim, SolidWorks, Inventor, AutoCAD, CoppeliaSim, MeshLab
Drawing & Typesetting	Office, L ^A T _E X
Languages	Chinese(Native), English(TOEFL 106)

Campus Experience

Student Union of Zhejiang University Chu Kochen Honor College	
Member of Academic Department	Sep. 2020 - June. 2021
Student Union of Zhejiang University Chu Kochen Honor College	
Head of Academic and Development Innovation Department	June. 2021 - Present
Go Team of Zhejiang University	
Main Player of the Team. Award: First place in Hangzhou University Go Tournament Team.	Sep. 2020 - Present
Eloquence Association of Zhejiang University	
Member of Debate Team. Award: Runner-up of the 18th Zhejiang University Freshman Debate Competition.	Oct. 2020 - Present
Artificial Intelligence Association of Zhejiang University	
Member of External Liaison Department	Sep. 2022 - Present

Miscellaneous

2008 - present	Go(Weiqi) Player: Amateur 5-duan, National second-class athlete
2014 - present	Saxophone: Amateur 10-level(Top in Amateur)
2009 - present	Piano: Amateur 8-level