# **Xiaoyan Cong**

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# Education \_\_\_\_\_

### **BS** in Robotics Engineering

GPA 3.97/4.00

Chu Kochen Honors College, Zhejiang University, Hangzhou China

Sep. 2020 - Present

#### Minoring 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

# **Technical Skills** —

**Programming** C/C++, Python(Pytorch), Markdown, Lingo, Matlab

Professional Softwares Linux, Simulink, Multisim, SolidWorks, Inventor, AutoCAD, CoppeliaSim, MeshLab

Drawing & Typesetting Office, LATEX

Languages Chinese(Native), English(TOEFL 106 – R:30, L:25, S:21, W:30)

# Research Experiences \_\_\_\_\_

#### Research on computer vision

Guided by Prof. Chenyang Lei, I'm exploring a novel approach to automatic image colorization given black-and-white images by imitating the imagination process of human experts

Mentor: Prof. Qifeng Chen
Feb. 2023 - Present

Mentor: Prof. Xiaowei Zhou

### Research on 3D reconstruction and novel niew synthesis

Guided by Sida Peng and Bojian Wu, I am exploring how to 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, and how to accurately reconstruct the geometry and reproduce the appearance of glossy and specular objects in a scene with the aid of polarization

Oct. 2022 - Present

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

Advised by Prof. Rong Xiong, 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

June. 2021 - June. 2022

Mentor: Prof. Wei Jiang

### 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.

June. 2022 - Jan. 2023

# Awards and Honors \_\_\_\_\_

2020-2021	Scholarship: China National Scholarship
2020-2021	Scholarship: First Prize Scholarship of Zhejiang University
2020-2021	Scholarship: Chu Kochen Honor College Leading Scholarship of Zhejiang University
2021-2022	Scholarship: Chu Kochen Honor College Excellence Scholarship of Zhejiang University(top in college)
2021-2022	Scholarship: Zhejiang Provincial Government Scholarship
2021-2022	Scholarship: First Prize Scholarship of Zhejiang University
2021-2022	Scholarship: Phoenix Special Scholarship
Feb. 2021	Contest: Honorable Mention in 2022 Mathemetical Contest In Modeling
Nov. 2021	Contest: first prize: Zhejiang Province in the 13th National College Students Mathematics Competition
1NOV. 2021	(non-mathematical category)
Dec. 2021	Contest: Third prize: Zhejiang Province in the 2021 Zhejiang University Physics (Theory) Innovation Competition

# 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

# Hobbies \_\_

2008 - present Go Player: Amateur 5-duan, National second-level athlete

2014 - present **Saxophone**: Amateur 10-level(Top in Amateur)

2009 - present Piano: Amateur 8-level