Xiaoyan Cong

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Education

Brown University, Ph.D. Student of Computer Science — Sep 2024 – Present
- Advisor: ***Professor Srinath Sridhar***

Zhejiang University, B.Eng. in Robotics Engineering, Chu Kochen Honor College — Sep 2020 – Jun 2024
- GPA: 3.99/4.0

Hong Kong University of Science and Technology, Exchange Student — Jan 2023 – Jun 2023
- Dean's List

Internship

Bytedance Inc. Research Scientist Intern, San Jose — Jun 2025 – Present
- Advisor: *Chongyang Ma*
- Topic: Video Editing Foundation Model, RL Post-Training

Publications

VIVA: VLM-Guided Instruction-Based Video Editing with Reward Optimization — Nov 2025
Xiaoyan Cong, Haotian Yang, Angtian Wang, Yizhi Wang, Yiding Yang, Canyu Zhang, Chongyang Ma
Under Review

DyTact: Capturing Dynamic Contacts in Hand-Object Manipulation — May 2025
Xiaoyan Cong, Angela Xing, Chandradeep Pokhariya, Rao Fu, Srinath Sridhar
3DV 2026 ***Oral*** [arxiv: 2506.03103]

PackUV: Packed Gaussian UV Maps for 4D Volumetric Video — May 2025
Aashish Rai, ***Xiaoyan Cong***, Angela Xing, Zekun Li, Tao Lu, Srinath Sridhar
Under Review

Art3D: Training-Free 3D Generation from Flat-Colored Illustration — Apr 2025
Xiaoyan Cong, Jiayi Shen Zekun Li, Rao Fu, Tao Lu, Srinath Sridhar
CVPR AI4CC Workshop, 2025, ***Oral*** [arxiv: 2504.10466]

GenHSI: Controllable Generation of Human-Scene Interaction Videos — Mar 2025
Zekun Li, Rui Zhou, Rahul Sajnani, ***Xiaoyan Cong***, Daniel Ritchie, Srinath Sridhar
Under Review [arxiv: 2506.19840]

OscillationInversion: Understand the structure of Large Flow Model through the Lens of Inversion Method — Oct 2024
Yan Zheng, Zhenxiao Liang, ***Xiaoyan Cong***, Yi Yang Lanqing Guo, Yuehao Wang, Peihao Wang, Zhangyang Wang
Under Review [arxiv: 2411.11135]

Automatic Controllable Colorization by Imagination — Jun 2024
Xiaoyan Cong, Yue Wu, Qifeng Chen, Chenyang Lei
CVPR, 2024 [arxiv: 2404.05661]

4DRecons: 4D Neural Implicit Deformable Objects Reconstruction from a single RGB-D Camera with Geometrical and Topological Regularizations — Jun 2024
Xiaoyan Cong, Haitao Yang, Liyan Chen, Kaifeng Zhang, Li Yi, Chandrajit Bajaj, Qixing Huang
Under Review [arxiv: 2406.10167]

Research Interests

My research interest lies in broad aspects of Computer Vision, Computer Graphics and Machine Learning topics, more specifically 3D spatiotemporal visual perception, understanding and reasoning of human physical interactions with the world. I am also interested in generative models, with a focus on video generation, video editing, and world models.

Selected Awards and Honors

Excellence Scholarship, by Chu Kochen Honors College, Zhejiang University, Top 1% 2022

Chinese National Scholarship, by Ministry of Education of the People's Republic of China, Top 0.2% 2021

Chunhui Scholarship, by College of Control Science and Engineering, Zhejiang University, Top 1% 2023

Zhejiang Provincial Government Scholarship, Top 2% 2020 - 2022

First-prize Scholarship of Zhejiang University, Top 2% 2020 - 2022