

# Wenyan Cong

[🌐 Website](#) [🔍 Google Scholar](#) [📄 GitHub](#)  
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## RESEARCH INTERESTS

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### Computer Vision:

- 3D Vision, Computational Photography

### Machine Learning:

- Generative Models, Large Language Models

## EDUCATION

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**The University of Texas at Austin** Aug. 2022 - Present  
Ph.D. Student, Electrical and Computer Engineering Advisor: Prof. [Zhangyang \(Atlas\) Wang](#)

**Shanghai Jiao Tong University** Sep. 2019 - Mar. 2022  
M.S., Computer Science and Engineering Advisor: Prof. [Li Niu](#) and Prof. [Liqing Zhang](#)  
Graduate with highest honor

**Shanghai Jiao Tong University** Sep. 2015 - Jun. 2019  
B.Eng., Computer Science and Engineering

## PROFESSIONAL EXPERIENCE

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**Snap Inc.** May. 2023 - Present  
Research Intern, Supervisor: [Dr. Jian Wang](#)  
Topic: High-quality video frame interpolation in pose domain.

**ZMO.AI** Jan. 2021 - Apr. 2021  
Research Intern  
Topic: Real-time background replacement and harmonization for on-model images.

**Hisense Group Holdings Co., Ltd.** Dec. 2020 - May 2021  
Research Intern  
Topic: Real-time high-resolution harmonization on virtual household devices.

**Shanghai Jiao Tong University** Dec. 2018 - Mar. 2022  
Research Assistant, Advisor: [Prof. Li Niu](#) and [Prof. Liqing Zhang](#)  
Topic: Image harmonization and video harmonization.

## PUBLICATIONS

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(Marker \* denotes equal-contribution first authorship.)

**Wenyan Cong\***, Hanxue Liang\*, Peihao Wang, Zhiwen Fan, Tianlong Chen, Mukund Varma, Yi Wang, and Zhangyang Wang, “Enhancing NeRF akin to Enhancing LLMs: Generalizable NeRF Transformer with Mixture-of-View-Experts”, IEEE International Conference on Computer Vision (ICCV), 2023. [\[link\]](#)

Li Niu, Junyan Cao, **Wenyan Cong**, and Liqing Zhang, “Deep Image Harmonization with Learnable Augmentation”, IEEE International Conference on Computer Vision (ICCV), 2023. [\[link\]](#)

Junyan Cao\*, **Wenyan Cong\***, Li Niu, Jianfu Zhang, and Liqing Zhang, “Deep Image Harmonization by Bridging the Reality Gap”, The 33rd British Machine Vision Conference (BMVC), 2022. [\[link\]](#)

Xinyuan Lu, Shengyuan Huang, Li Niu, **Wenyan Cong**, and Liqing Zhang, “Deep Video Harmonization With Color Mapping Consistency”, 31st International Joint Conference on Artificial Intelligence (IJCAI), 2022. [\[link\]](#)

**Wenyan Cong**, Xinhao Tao, Li Niu, Jing Liang, Xuesong Gao, Qihao Sun, and Liqing Zhang, “High-Resolution Image Harmonization via Collaborative Dual Transformations”, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022. [\[link\]](#)

Xinyuan Lu, Shengyuan Huang, Li Niu, **Wenyan Cong**, and Liqing Zhang, “HYoutube: Video Harmonization Dataset”, arXiv, 2021. [\[link\]](#)

Li Niu, **Wenyan Cong**, Liu Liu, Yan Hong, Bo Zhang, Jing Liang, and Liqing Zhang, “Making Images Real Again: A Comprehensive Survey on Deep Image Composition”, arXiv, 2021. [\[link\]](#)

**Wenyan Cong**, Li Niu, Jianfu Zhang, Jing Liang, and Liqing Zhang, “BargainNet: Background-Guided Domain Translation for Image Harmonization”, International Conference on Multimedia and Expo (ICME), 2021. Oral. [\[link\]](#)

**Wenyan Cong**, Jianfu Zhang, Li Niu, Liu Liu, Zhixin Ling, Weiyuan Li, and Liqing Zhang, “DoveNet: Deep Image Harmonization via Domain Verification”, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020. [\[link\]](#)

**Wenyan Cong**, Jianfu Zhang, Li Niu, Liu Liu, Zhixin Ling, Weiyuan Li, and Liqing Zhang, “Image Harmonization Datasets: HCOCO, HAdobe5k, HFlickr, and Hday2night”, arXiv, 2019. [\[link\]](#)

## HONORS

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UT Austin Cockrell Engineering Fellowship	2022
Shanghai Outstanding Graduate	2022
Academic Excellence Scholarship of Shanghai Jiao Tong University	2021
National Scholarship for Graduate Students (Top 0.2% Nationwide)	2020
Merit Student of Shanghai Jiao Tong University	2020
Excellent League Cadre of Shanghai Jiao Tong University	2019
Second Prize in ”HUAWEI Cup” China Post-Graduate Mathematical Contest in Modeling	2019
Outstanding Graduate of Shanghai Jiao Tong University	2019

## PATENTS

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“Real Human Harmonization in Virtual Scenes”, China Patent, No. 202111051553.6., 2021.

“High-Resolution Image Harmonization via 3D Look-Up Tables”, China Patent, No. 202111051117.9., 2021.

“Progressive High-Resolution Image Harmonization”, China Patent, No. 202111050230.5., 2021.

## TEACHING

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ECE 379K - Introduction to Computer Vision (Fall 2022): Teaching assistant, Univ. of Texas at Austin

CS245 - Principles of Data Science (Spring 2021): Teaching assistant, Shanghai Jiao Tong University

CS7335 - Statistical Learning and Inference (Fall 2020): Teaching assistant, Shanghai Jiao Tong University

CS245 - Principles of Data Science (Spring 2020): Teaching assistant, Shanghai Jiao Tong University

## SERVICES

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Conference Reviewer: IJCAI-21, CVPR-22, ICCV-22, ECCV-22, ICCV-23, Neurips-23, WACV-23

## SKILLS

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- Programming: Python, C++, Git, Bash, SQL, MATLAB
- Packages: PyTorch, TensorFlow, OpenCV