

Wenyan Cong

✉ plcwyam17320@sjtu.edu.cn

🌐 <https://github.com/Mia-Cong>

🔗 [congwenyan](#)

☎ (+86) 19921314136

Education

Shanghai Jiao Tong University (SJTU)

M.S. in Computer science and technology

Shanghai, China

Sept 2019- Mar 2022(expected)

Advisor: [Li Niu](#)

Overall GPA: **3.83/4.00**

Shanghai Jiao Tong University (SJTU)

B.E. in Computer science and technology

Shanghai, China

Sept 2015- Jun 2019

Overall GPA: **3.6/4.00**

Research interests

Computer Vision, Machine Learning, Artificial Intelligence, Low-level Vision, Image Harmonization

Research Experiences

Deep Image Harmonization (DIH)

Graduate Research Assistant, supervised by assoc.Prof. Li Niu, Shanghai, China

Jul 2019 - Present

- **Domain Verification Based DIH:** Introduce the concept of domain verification and design a domain verification discriminator pulling close the foreground domain and background domain to generate plausible harmonized images; achieved state-of-the-art performance: ~31% improvements than strongest baseline; provided the first benchmark in image harmonization field.
- **Background-Guided Domain translation for DIH:** Formulated image harmonization as background guided domain translation task where the extracted background domain code serves as a guidance for foreground harmonization; Provided a way to predict the inharmony level of a composite image using domain code; achieved new state-of-the-art.
- **Rendered Human Harmonization Dataset RHHarmony Construction**
- **Cross-Domain Harmonization**
- **High-Resolution DIH**

Image Harmonization Dataset Construction

Undergraduate Research Assistant, supervised by assoc.Prof. Li Niu, Shanghai, China

Dec 2018 - Aug 2019

- Constructed and released the first large-scale image harmonization dataset iHarmony4 with 4 sub-datasets (HCOCO, HAdobe5k, HFlickr, and Hday2night) and 73146 pairs of high-quality and diverse images.

Publications

[C1] **Image Harmonization Datasets: HCOCO, HAdobe5k, HFlickr, and Hday2night.**

- Wenyan Cong, Jianfu Zhang, Li Niu, Liu Liu, Zhixin Ling, Weiyuan Li, and Liqing Zhang.
- Preprinted on *arXiv preprint arXiv:1908.10526*, 2019.

[C2] **DoveNet: Deep Image Harmonization via Domain Verification.**

- Wenyan Cong, Jianfu Zhang, Li Niu, Liu Liu, Zhixin Ling, Weiyuan Li, and Liqing Zhang.
- Published on *IEEE Conference on Computer Vision and Pattern Recognition, CVPR 2020*.

[C3] **BargainNet: Background-Guided Domain Translation for Image Harmonization.**

- Wenyan Cong, Li Niu, Jianfu Zhang, Jing Liang, and Liqing Zhang.
- Published on *IEEE International Conference on Multimedia and Expo, ICME 2021* **Oral**.

[C4] **Anonymous Submission**

- Wenyan Cong, Junyan Cao, Li Niu, Jianfu Zhang, and Liqing Zhang.
- Submitted to *IEEE International Conference on Computer Vision, ICCV 2021*.

Leadership and Activities

Teaching Assistant in SJTU

2020 & 2021

- CS245: *Principles of Data Science* for undergraduates, 2020 Spring.
- CS7335: *Statistical Learning and Inference* for postgraduates, 2020 Fall.
- CS245: *Principles of Data Science* for undergraduates, 2021 Spring.

School Counselor of Campus Life Management Department in SJTU

Jul 2018- Present

- Responsible for the management of 92 life guidance teachers and 23 teacher studios, and organized more than 40 cultural and sports activities including New Year Gifts, Assessment of Standardized Dormitory, etc..

Honors and Awards

- **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

Others

Academic Services

- **Conference Reviewer:** IJCAI 2021

Skills

- **Programming:** python, C++, Git, bash, SQL, MATLAB
- **Packages:** PyTorch, TensorFlow, OpenCV