

# Xiaodong Cun

University of Macau

Macau SAR.

China

☎ (+86) 17765703545

✉ [vinthony@gmail.com](mailto:vinthony@gmail.com), [yb87432@umac.mo](mailto:yb87432@umac.mo)

📄 [vinthony.github.io](https://vinthony.github.io)

## Education

- 2018–Now **Ph.D in Computer Science**, Image Processing and Pattern Recognition Laboratory, Department of Computer Science, University of Macau, Macau, China.
- 2015–2018 **M.S. in Computer Science**, Image Processing and Pattern Recognition Laboratory, Department of Computer Science, University of Macau, Macau, China.
- 2011–2015 **B.S. in Computer Science**, Xidian University, Xi'an, China.

## Intern Experience

- Jul.–Sep. **HIKVision Research Institute**  
2018 *Algorithm Engineer Intern*  
Short research experiences on neural network slimming. Re-implements SOTA methods on ResBlock-based network slimming.
- Jul.–Sep. **Alibaba Crop.**  
2014 *Software Engineer Intern*  
Developing and Maintaining the front-end interface of TaoBao mobile application.

## Main Research Target

- Ph.D I am focusing on the algorithms of mask-guided image processing. Given an image and its corresponding mask (or predicted mask), I try to design the efficient and powerful learning-based method on the specific given region. This task has widely apply range in **shadow removal**, **watermark removal**, and **attention-guided image-to-image translation**
- Master We are focusing on the algorithms of Computational Photography area, especially novel view synthesis in light field images. We present a novel neural network for **Single Image View Synthesis** using light field images. Our network firstly utilized the pre-trained depth model as the prior features of single image-based network, achieving the states-of-the-art performance among other methods.

## Publication

- 2020 **Cun, X.**, & Pun, C. M. *Improving the Harmony of the Composite Image by Spatial-Separated Attention Module*. **IEEE Trans. on Image Processing (TIP)**
- 2019 **Cun, X.**, Pun, C. M., & Shi, C. *Towards Ghost-free Shadow Removal via Dual Hierarchical Aggregation Network and Shadow Matting GAN*. **AAAI Conference on Artificial Intelligence (AAAI-20)**
- 2018 **Cun, X.**, & Pun, C. M. *Image Splicing Localization via Semi-global Network and Fully Connected Conditional Random Fields*. **ECCV18 Workshop (Oral)**.
- 2018 **Cun, X.**, Xu, F., Pun, C. M., & Gao, H. *Depth-Assisted Full Resolution Network for Single Image-Based View Synthesis*. **IEEE Computer Graphics and Applications (Also appear in SIGGRAPH2018 Poster Session)**.

2018 **Cun, X.**, Pun, C. M., & Gao, H. *Applying stochastic second-order entropy images to multi-modal image registration*. **Signal Processing: Image Communication**.

## Technical Skills

Programming PYTHON, C/C++, MATLAB, JAVASCRIPT

Deep TORCH, PYTORCH, TENSORFLOW  
Learning

Editing ADOBE PHOTOSHOP, ADOBE ILLUSTRATOR, L<sup>A</sup>T<sub>E</sub>X

## Awards

2018-Now **Researching Assistant**, University of Macau

2015-2018 **Teaching Assistant**, University of Macau

2013 **Excellence Award**, University's College Students' Innovative Entrepreneurship Competition.

2012 **Third Prize Scholarship**, Xidian University