# Yun-Chun Chen

## Education

Sept. 2014 Bachelor of Science, National Taiwan University, Taipei, Taiwan.

- Jun. 2018 Department of Electrical Engineering

## Work Experience

- Jan. 2020 Vision and Learning Lab, University of California at Merced, CA, USA.
- Jun. 2020 Short-term Visiting Scholar. Mentor: Ming-Hsuan Yang
  - Proposed a self-attention algorithm for video-based 3D human pose and shape estimation.
  - Apr. 2019 Vision and Learning Lab, Virginia Tech, VA, USA.
- Jul. 2019 Short-term Visiting Scholar. Mentor: Jia-Bin Huang
  - o Proposed an algorithm for searching structured image prior for image restoration and synthesis tasks.
- Jul. 2017 Computer Vision Lab, Academia Sinica, Taipei, Taiwan.
- Jan. 2019 Research Assistant. Mentors: Yen-Yu Lin, Jia-Bin Huang, and Ming-Hsuan Yang
  - o Proposed a cross-task consistency algorithm for joint semantic matching and object co-segmentation.
  - o Proposed a cross-resolution generative adversarial network for cross-resolution visual recognition.
  - o Proposed a cross-domain consistency algorithm for unsupervised domain adaptation.
  - o Developed a weakly-supervised learning algorithm for semantic matching.
- Nov. 2016 Communication and Multimedia Lab, National Taiwan University, Taipei, Taiwan.
- Oct. 2018 Undergraduate Student Researcher. Mentor: Winston Hsu
  - o Developed a 3D segmentation network for lung cancer radiomics-tumor region segmentation.
  - o Proposed a weakly-supervised learning method for object localization.

## Selected Publications

## Journal papers

PAMI 2020 Show, Match and Segment: Joint Weakly Supervised Learning of Semantic Matching and Object Co-segmentation.

Yun-Chun Chen, Yen-Yu Lin, Ming-Hsuan Yang, and Jia-Bin Huang

IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), 2020

PAMI Cross-Resolution Adversarial Dual Network for Person Re-Identification and Beyond.

Yun-Chun Chen\*, Yu-Jhe Li\*, Yen-Yu Lin, and Yu-Chiang Frank Wang

IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) (under review)

#### Conference papers

ECCV 2020 NAS-DIP: Learning Deep Image Prior with Neural Architecture Search.

Yun-Chun Chen, Chen Gao, Esther Robb, and Jia-Bin Huang

European Conference on Computer Vision (ECCV), Glasgow, UK, August, 2020

ECCV 2020 Learning to Learn in a Semi-Supervised Fashion.

Yun-Chun Chen, Chao-Te Chou, and Yu-Chiang Frank Wang

European Conference on Computer Vision (ECCV), Glasgow, UK, August, 2020

ICCV 2019 Recover and Identify: A Generative Dual Model for Cross-Resolution Person Re-Identification.

Yun-Chun Chen\*, Yu-Jhe Li\*, Yen-Yu Lin, Xiaofei Du, and Yu-Chiang Frank Wang

IEEE International Conference on Computer Vision (ICCV), Seoul, South Korea, October, 2019

CVPR 2019 CrDoCo: Pixel-level Domain Transfer with Cross-Domain Consistency.

Yun-Chun Chen, Yen-Yu Lin, Ming-Hsuan Yang, and Jia-Bin Huang

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Long Beach, California, June, 2019

AAAI 2019 Learning Resolution-Invariant Deep Representations for Person Re-Identification.

 $\textbf{Yun-Chun Chen}^*, \ \textbf{Yu-Jhe Li}^*, \ \textbf{Xiaofei Du}, \ \textbf{and Yu-Chiang Frank Wang}$ 

AAAI Conference on Artificial Intelligence (AAAI), Honolulu, Hawaii, January, 2019 Oral Presentation

ACCV 2018 Deep Semantic Matching with Foreground Detection and Cycle-Consistency.

**Yun-Chun Chen**, Po-Hsiang Huang, Li-Yu Yu, Jia-Bin Huang, Ming-Hsuan Yang, and Yen-Yu Lin Asian Conference on Computer Vision (ACCV), Perth, Australia, December, 2018

## Teaching Experience

## National Taiwan University.

Spring 2018 EE 5184: Machine Learning.

Fall 2017 EE 1004: Computer Programming.

#### Honors and Awards

2019 Appier Al Scholarship for ICCV 2019.

2019 Appier Al Scholarship for CVPR 2019.

2019 Appier Al Scholarship for AAAI 2019.

2018 Third Place in IEEE Video and Image Processing (VIP) Cup.

2017 China Technical Consultants Incorporation Scholarship.

2017 Second Prize in NTUEE Undergraduate Innovation Award.

## Academic Services

Conference Neural Information Processing Systems (NeurIPS) 2020

Reviewer IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020

IEEE International Conference on Computer Vision (ICCV) 2019

European Conference on Computer Vision (ECCV) 2020

British Machine Vision Conference (BMVC) 2019, 2020

Asian Conference on Computer Vision (ACCV) 2020

IEEE Winter Conference on Applications of Computer Vision (WACV) 2021

AAAI Conference on Artificial Intelligence (AAAI) 2020

IEEE International Conference on Image Processing (ICIP) 2019

## References

Research Mentor Ming-Hsuan Yang, Professor, University of California at Merced.

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Research Mentor Jia-Bin Huang, Assistant Professor, Virginia Tech.

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Research Mentor Yen-Yu Lin, Professor, National Chiao Tung University.

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Research Mentor Winston Hsu, Professor, National Taiwan University.

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