

## Education

- Sept. 2020 **Ph.D. Student**, University of Toronto, ON, Canada.  
– Present Department of Computer Science  
Advisor: Animesh Garg
- Sept. 2014 **Bachelor of Science**, National Taiwan University, Taipei, Taiwan.  
– Jun. 2018 Department of Electrical Engineering

## Work Experience

- Sept. 2020 **People, AI and Robotics Lab, University of Toronto, ON, Canada.**  
– Present Research Assistant. Advisor: Animesh Garg  
◦ Working on grasp synthesis and related problems.
- Sept. 2020 **Vector Institute, Toronto, ON, Canada.**  
– Present Student Researcher. Advisor: Animesh Garg
- 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  
◦ 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  
◦ Proposed a cross-task consistency algorithm for joint semantic matching and object co-segmentation.  
◦ Proposed a cross-resolution generative adversarial network for cross-resolution visual recognition.  
◦ Proposed a cross-domain consistency algorithm for unsupervised domain adaptation.  
◦ 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  
◦ Developed a 3D segmentation network for lung cancer radiomics-tumor region segmentation.  
◦ 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) (major revision)

### Conference papers

- ICRA 2021 **Learning by Watching: Physical Imitation of Manipulation Skills from Human Videos.**  
Haoyu Xiong, Quanzhou Li, **Yun-Chun Chen**, Homanga Bharadhwaj, Samarth Sinha, and Animesh Garg  
IEEE International Conference on Robotics and Automation (ICRA), Xian, China, May, 2021 (under review)

- 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.**  
**Yun-Chun Chen\***, Yu-Jhe Li\*, Xiaofei Du, 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

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## Teaching Experience

**National Taiwan University.**

Spring 2018 EE 5184: Machine Learning.

Fall 2017 EE 1004: Computer Programming.

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## Honors and Awards

- 2019 Appier AI Scholarship for ICCV 2019.
- 2019 Appier AI Scholarship for CVPR 2019.
- 2019 Appier AI 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.

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## Academic Services

- Journal Reviewer IEEE Transactions on Image Processing (TIP)
- Conference Neural Information Processing Systems (NeurIPS) 2020
- Reviewer International Conference on Learning Representations (ICLR) 2021
- International Conference on Machine Learning (ICML) 2021
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020, 2021
- 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
- IEEE International Conference on Robotics and Automation (ICRA) 2021
- Conference on Robot Learning (CoRL) 2020
- International Joint Conference on Artificial Intelligence (IJCAI) 2021
- AAAI Conference on Artificial Intelligence (AAAI) 2020, 2021
- IEEE International Conference on Image Processing (ICIP) 2019

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## References

Ph.D. Advisor **Animesh Garg**, Assistant Professor, University of Toronto.

✉ [garg@cs.toronto.edu](mailto:garg@cs.toronto.edu)

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

✉ [mhyang@ucmerced.edu](mailto:mhyang@ucmerced.edu)

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

✉ [jbhuang@vt.edu](mailto:jbhuang@vt.edu)

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

✉ [lin@cs.nctu.edu.tw](mailto:lin@cs.nctu.edu.tw)