

Yen-Cheng Liu

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Education	Georgia Tech , Atlanta, GA <i>Ph.D. student</i> , Machine Learning GPA: 4.00/4.00	Aug. 2018 - Present
	National Taiwan University , Taipei, Taiwan <i>M.S.</i> , Electrical Engineering GPA: 4.19/4.30	Sep. 2015 - June 2017
	Technical University of Munich , Munich, Germany <i>Exchange Student</i> , EE&IT	Sep. 2014 - Mar. 2015
	National Chiao Tung University , Hsinchu, Taiwan <i>B.S.</i> , Electrical and Computer Engineering GPA: 4.24/4.30	Sep. 2011 - June 2015
Research Interest	Machine Learning, Computer Vision, Learning with limited supervision (Few-shot/Semi-supervised Learning), Scene Understanding, Domain Adaptation, Representation Learning	
Selected Publications	[1] Y.-C. Liu , C.-Y. Ma, Z. He, C.-W. Kuo, K. Chen, P. Zhang, B. Wu, Z. Kira, P. Vajda Unbiased Teacher for Semi-Supervised Object Detection, <i>International Conference on Learning Representations (ICLR)</i> , 2021	
	[2] J. Tian, Y.-C. Liu , N. Glaser, Y.-C. Hsu, Z. Kira. Posterior Re-calibration for Imbalanced Datasets, <i>Conference on Neural Information Processing Systems (NeurIPS)</i> , 2020	
	[3] Y.-C. Liu , J. Tian, N. Glaser, Z. Kira. When2com: Multi-Agent Collaborative Perception via Communication Graph Grouping, <i>IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2020	
	[4] Y.-C. Liu , J. Tian, C.-Y. Ma, N. Glaser, C.-W. Kuo, Z. Kira. Who2com: Collaborative Perception via Learnable Handshake communication, <i>International Conference on Robotics and Automation (ICRA)</i> , 2020	
	[5] J. Tian, W. Chung, N. Glaser, Y.-C. Liu , Z. Kira. UNO: Uncertainty-aware Noisy-Or Multimodal Fusion for Unanticipated Input Degradation, <i>International Conference on Robotics and Automation (ICRA)</i> , 2020	
	[6] P.-Y. Chen*, A. Liu*, Y.-C. Liu , Y.-C. F. Wang. Towards Scene Understanding: Unsupervised Monocular Depth Estimation with Semantic-aware Representation, <i>IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2019 (Oral ; * equal contributions)	
	[7] W.-Y. Chen, Y.-C. Liu , Z. Kira, Y.-C. F. Wang, J.-B. Huang. A Closer Look at Few-shot Classification, <i>International Conference on Learning Representations (ICLR)</i> , 2019	
	[8] A. Liu, Y.-C. Liu , Y.-Y. Yeh, Y.-C. F. Wang. A Unified Feature Disentangler for Multi-Domain Image Translation and Manipulation, <i>Conference on Neural Information Processing Systems (NeurIPS)</i> , 2018	

- [9] **Y.-C. Liu**, Y.-Y. Yeh, T.-C. Fu, S.-D. Wang, W.-C. Chiu, Y.-C. F. Wang. De-tach and Adapt: Learning Cross-Domain Disentangled Deep Representation, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018 (**Spotlight**)
- [10] Y.-Y. Yeh, **Y.-C. Liu**, W.-C. Chiu, Y.-C. F. Wang. Static2Dynamic: Video Inference from a Deep Glimpse, *IEEE Transactions on Emerging Topics in Computational Intelligence*, 2020
- [11] J. Tian, W. Cheung, N. Glaser, **Y.-C. Liu**, Z. Kira. UNO: Uncertainty-aware Noisy-Or Multimodal Fusion for Unanticipated Input Degradation, *International Conference on Intelligent Robots and Systems (IROS Workshops)*, 2019
- [12] Y.C. Hsu, **Y.-C. Liu**, Z. Kira. Re-evaluating Continual Learning Scenarios: A Categorization and Case for Strong Baselines, *Conference on Neural Information Processing Systems Workshops (NeurIPS Workshops)*, 2018
- [13] Y.-J. Li, F.-E. Yang, **Y.-C. Liu**, Y.-Y. Yeh, X. Du, Y.-C. F. Wang. Adaptation and Re-Identification Network: An Unsupervised Deep Transfer Learning Approach to Person Re-Identification, *IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPR workshops)*, 2018
- [14] T.-S. Kuo, K.-S. Tseng, J.-W. Yan **Y.-C. Liu**, Y.-C. F. Wang. Deep Aggregation Net for Land Cover Classification, *IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPR workshops)*, 2018
- [15] **Y.-C. Liu**, W.-C. Chiu, S.-D. Wang, Y.-C. F. Wang. Domain-Adaptive Generative Adversarial Networks for Sketch-to-Photo Inversion, *IEEE International Workshop on Machine Learning for Signal Processing (MLSP)*, 2017

EXPERIENCE

Research Intern

Facebook Research
Menlo Park, CA

May 2020 - Aug 2020

Mentors: Chih-Yao Ma, Zijian He, Peter Vajda

- Semi-supervised Object Detection [1]

Graduate Research Assistant

Georgia Tech
Atlanta, GA

Aug 2018 - Present

Advisor: Prof. Zsolt Kira

- Multi-Agent Collaborative Perception and Scene Understanding[3,4,5]
- Semi-supervised Object Detection [1]
- Analysis on Few-shot Classification[7]

Graduate Research

Academia Sinica & NTU
Taipei, Taiwan

July 2016 - July 2018

Advisor: Prof. Yu-Chiang Frank Wang

- Cross-Domain Disentangled Representation Learning [8,9]
- Single-Image Depth Estimation with Semantics Consistency[6]
- Analysis on Few-shot Classification[7]

Academic Services

Reviewer: CVPR '19, ICCV '19, AAAI '20, CVPR '20, ECCV '20, NeurIPS '20, ICLR '21, CVPR '21

Skills

Computer Languages: C, C++, Java, Bash, Python, MATLAB, L^AT_EX.
Toolbox/Software: PyTorch, TensorFlow, Torch, Caffe, Chainer, Unity.

Honors & Awards

Dean's List Award (4 times)

2011-2015