

Yen-Cheng Liu

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Page: <https://ycliu93.github.io>

EDUCATION

Georgia Tech, Atlanta, GA

Ph.D. student, Machine Learning

Aug. 2018 -

National Taiwan University, Taipei, Taiwan

M.S., Electrical Engineering

Sep. 2015 - June 2017

GPA: 4.19/4.30

Technical University of Munich, Munich, Germany

Exchange Student, EE&IT

Sep. 2014 - Mar. 2015

National Chiao Tung University, Hsinchu, Taiwan

B.S., Electrical and Computer Engineering

Sep. 2011 - June 2015

GPA: 4.24/4.30

RESEARCH INTERESTS

Machine Learning, Computer Vision, Robotics,

Domain Adaptation, Representation Learning, Multi-Modalities Machine Perceptions.

PUBLICATIONS

Y.-C. Liu, Y.-Y Yeh, T.-C. Fu, S.-D. Wang, W.-C. Chiu, Y.-C. F. Wang. Detach and Adapt: Learning Cross-Domain Disentangled Deep Representation, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018 (**Spotlight Presentation**)

A. Liu, **Y.-C. Liu**, Y.-Y Yeh, Y.-C. F. Wang. A Unified Feature Disentangler for Multi-Domain Image Translation and Manipulation, *Conference on Neural Information Processing Systems (NIPS)*, 2018

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

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

Y.-Y Yeh, **Y.-C. Liu**, W.-C. Chiu, Y.-C. F. Wang. Anonymous Paper Title, *European Conference on Computer Vision (ECCV)*, 2018 (under review)

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

A.-S. Liu, T.-W. Hsu, P.-H. Hsiao, **Y.-C. Liu**, L.-C. Fu. The Manhunt Network: People Tracking in Hybrid-Overlapping Under the Vertical Top-view Depth Camera Networks, *IEEE Conference on Advanced Robotics and Intelligent Systems*, 2016

Y.-C. Liu, P.-H. Ciou, C.-S. Fuh. 2D+3D Morphing Model, *IPPR Conference on Computer Vision, Graphics, and Image Processing (CVGIP)*, 2016

EXPERIENCE	Research Assistant <div>National Taiwan University Taipei, Taiwan</div> Advisor: Prof. Yu-Chiang Frank Wang <ul style="list-style-type: none"> • Single-Image Depth Estimation with Semantics Consistency <ul style="list-style-type: none"> - Integrated unsupervised depth estimation with semantic segmentation - Proposed segment-based stereo consistency to improve depth estimation • Stochastic Video Synthesis and Completion <ul style="list-style-type: none"> - Extracted time-order representation from limited anchor frames - Achieved video prediction and interpolation based on sequence-sequence model
	Graduate Research <div>CITI, Academia Sinica Taipei, Taiwan</div> Advisor: Prof. Yu-Chiang Frank Wang <ul style="list-style-type: none"> • Learning Cross-Domain Disentangled Representation <ul style="list-style-type: none"> - Excelled the state-of-the-art in task of unsupervised domain adaptation - Achieved unsupervised image translation conditioned on given attribute • Domain-Adaptive GAN for Sketch Inversion <ul style="list-style-type: none"> - Proposed cross-style sketch-to-photo inversion based on generative models - Adapted the sketch-to-photo inversion to unsupervised sketch style
	Teaching Assistant <div>National Taiwan University Taipei, Taiwan</div> Instructor: Chung-Yang (Ric) Huang Course: Data Structure and Programming <ul style="list-style-type: none"> - Provided one-to-one assistance for 150+ students and graded the programming assignments
SIDE PROJECTS	Jenga Builder Automatic reconstruction of Jenga tower using 6-DOF robotics arm and RGB-cam
	Bio-baseball Created sports simulator controlled by eye movement and forearm muscles
	AI-Bomber-Man Applied Flood-Fill algorithm to create multiple AI enemies of Bomberman game
	Hiticket.tk Built up real-time system for secondhand ticket information exchange
COMPUTER SKILLS	Languages: C, C++, Java, Perl, Bash, Python, MATLAB, Lua, SQL, L ^A T _E X. Toolbox/Software: TensorFlow, PyTorch, Theano, Torch, Caffe, Chainer, Unity.
HONORS & AWARDS	GAN MOST Competition First Prize <div>2017</div>
	Rotary International Graduate Student Scholarship <div>2016</div>
	Dean's List Award (4 times) <div>2011-2015</div>
	Exchange Student Scholarship <div>2014</div>
	Pan Wen Yuan Foundation Scholarship <div>2013</div>