YU-JHE LI

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RESEARCH INTERESTS

Computer Vision and Machine Learning.

EDUCATION

National Taiwan University, Taipei, Taiwan	Sep. 2017 - Jan. 2019
M.S. in Data Science program of Communication Engineering	Major GPA: $4.18/4.3$
National Tsing Hua University, Hsinchu, Taiwan	Sep. 2013 - Jan. 2017
B.S. in Electrical Engineering and Computer Science (EECS)	Major GPA: $4.09/4.3$
Exchange scholar at: (all with scholarships)	
• Dept. Computer Science, TsingHua University, Beijing, China.	$2014\ Summer$
• Dept. Computer Science, Fudan University, Shanghai, China.	$2015\ Summer$
• Dept. Computer Science, University of Minnesota, Minneapolis, USA.	2016 Fall

RESEARCH EXPERIENCE

The Robotics Institute, Carnegie Mellon University Research Associate working with Prof. Kris M. Kitani

September 2019 - Current Pittsburgh, PA, USA

- Built cross-camera tracking model for workers in construction sites using location, motion, and appearance deep features, followed by action recognition.
- Learned clothing color invariant representations via adversarial learning and body structure disentanglement for person re-identification.

Vision and Learning Lab, National Taiwan University Graduate Research Assistant working with Prof. Yu-Chiang Frank Wang Taipei, Taiwan

- Built novel deep framework for unsupervised learning and domain adaptation in re-identification via unsupervised pose disentanglement.
- Learned resolution-invariant representations for cross-resolution tasks via adversarial learning of super-resolution and image generation.

Institute for Health Informatics, University of Minnesota
Undergraduate Research Assistant working with Prof. Chih-Lin Chi
Minneapolis, MN, USA

• Developed machine learning model for statistical genetic disease prediction and analysis.

PUBLICATIONS

Under Review:

- <u>Yu-Jhe Li</u>, Xinshuo Wen, Kris M. Kitani. "Learning Clothing Color Invariant Representation for Person Re-identification" (In submission to CVPR)
- <u>Yu-Jhe Li</u>*, Yun-Chun Chen*, Yen-Yu Lin, and Yu-Chiang Frank Wang. "Cross-Modality Learning for Cross-Resolution Re-Identification." *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*. (* indicates equal contribution)

Conference Papers:

- 1. <u>Yu-Jhe Li</u>, Ci-Siang Lin, Yan-Bo Lin, and Yu-Chiang Frank Wang. "Cross-Dataset Person Re-Identification via Unsupervised Pose Disentanglement and Adaptation." *IEEE International Conference on Computer Vision (ICCV)*. Nov 2019.
- 2. <u>Yu-Jhe Li</u>*, Yun-Chun Chen*, Yen-Yu Lin, Xiaofei Du, and Yu-Chiang Frank Wang. "Recover and Identify: Generative Dual Model for Cross-Resolution Person Re-Identification." *IEEE International Conference on Computer Vision (ICCV)*. Nov 2019. (* indicates equal contribution)

- 3. Yen-Ting Liu, <u>Yu-Jhe Li</u>, Fu-En Yang, Shang-Fu Chen, and Yu-Chiang Frank Wang. "Learning Hierarchical Self-Attention for Video Summarization." *IEEE International Conference on Image Processing (ICIP)*. Sep 2019.
- 4. Wen-Hsuan Chu, <u>Yu-Jhe Li</u>, Jing-Cheng Chang, and Yu-Chiang Frank Wang. "Spot and Learn: A Maximum-Entropy Image Patch Sampler for Few-Shot Classification." *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. Jun 2019.
- 5. Yan-Bo Lin, <u>Yu-Jhe Li</u>, and Yu-Chiang Frank Wang. "Dual-modality Seq2seq Network for Audio-Visual Event Localization." *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*. May 2019.
- 6. <u>Yu-Jhe Li</u>*, Yun-Chun Chen*, XiaoFei Du, and Yu-Chiang Frank Wang. "Learning Resolution-Invariant Deep Representations for Person Re-Identification." *AAAI Conference on Artificial Intelligence (AAAI)*. Jan 2019. (* indicates equal contribution)
- 7. Yu-Jhe Li, Hsin-Yu Chang, Yu-Jing Lin, Po-Wei Wu, and Yu-Chiang Frank Wang. "Deep Reinforcement Learning for Playing 2.5D Fighting Games." *IEEE International Conference on Image Processing (ICIP)*. Oct 2018.
- 8. <u>Yu-Jhe Li</u>, Fu-En Yang, Yen-Cheng Liu, Yu-Ying Yeh, Xiao-Fei Du, and Yu-Chiang Frank Wang. "Adaptation and Re-Identification Network: An Unsupervised Deep Transfer Learning Approach to Person Re-Identification." *IEEE Conference on Computer Vision and Pattern Recognition* (CVPR) Workshops. Jun 2018.
- 9. Yun-Chun Chen, Yu-Jhe Li, Aragorn Tseng, and Tsungnan Lin. "Deep Learning for Malicious Flow Detection." *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*. Oct 2017.

TEACHING EXPERIENCE

Teaching Assistant at National Taiwan University

• CommE 5052: Deep Learning for Computer Vision

Spring 2019

• CommE 5052: Deep Learning for Computer Vision

Spring 2018

• EE 1004: Introduction to Programming

Fall 2017

WORK EXPERIENCE

Internships

• Software Engineer at Dragon Cloud AI Inc., Winter 2018.

San Francisco, USA

• Software Engineer at Trend Micro Inc., Summer 2017.

Taipei, Taiwan

ACADEMIC HONORS

• Best Master Thesis Award, TAAI 2019.

Taipei, Taiwan

• Best Master Thesis Award, IPPR 2019.

Taipei, Taiwan

• Foxconn Technology Research Award, Foxconn Technology 2019.

Taipei, Taiwan

• NTU Academic Outstanding Award, National Taiwan University 2018.

Taipei, Taiwan

• Academic Scholoarship, Pan Wen Yuan Foundation 2018.

Taipei, Taiwan

• Academic Award, Witty Technology Education Foundation 2018.

 $Taipei,\ Taiwan$

• Student Paper Award, CVGIP 2018.

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• Second Place, Nvidia GTC 2018 research poster competition.

Taipei, Taiwan

PROFESSIONAL ACTIVITY

• Reviewer for CVPR 2020, ECCV 2020.

Dec. 2019

- Invited Speaker at The 3rd Augmented Intelligence and Interaction (AII) Workshop. Jul. 2019
- Reviewer for IEEE International Conference on Computer Vision (ICCV) 2019. Jun. 2019
- Invited Teaching Assistant at AI summer school in Hsinchu.

Aug. 2018