Yao-Hung (Hubert) Tsai

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🦬 https://yaohungt.github.io

Research Interests

I work on Deep Learning and its applications.

Education

Carnegie Mellon University, Pittsburgh, PA, USA   *Aug 2016 - May 2021*
- Ph.D. in Machine Learning within School of Computer Science
- *Advised by Dr. Ruslan Salakhutdinov*
- GPA: 4.15/4.0

National Taiwan University, Taipei, Taiwan   *Aug 2010 - Jun 2014*
- B.S. in Electrical Engineering (graduated with Department Honors)
- Department Representative to Receive Undergraduate Diploma
- GPA: 4.19/4.0

Publications

Conference Publications

[8] Wei-Yu Chen, Tzu-Ming Harry Hsu, **Yao-Hung Hubert Tsai**, Yu-Chiang Frank Wang and Ming-Syan Chen. "Transfer Neural Trees for Heterogeneous Domain Adaptation", *European Conference on Computer Vision (ECCV)*, 2016.

[7] **Yao-Hung Hubert Tsai**, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Learning Cross-Domain Landmarks for Heterogeneous Domain Adaptation", *Computer Vision and Pattern Recognition (CVPR)*, 2016.

[6] **Yao-Hung Hubert Tsai**, Cheng-An Hou, Wei-Yu Chen, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Domain-Constraint Transfer Coding for Imbalanced Unsupervised Domain Adaptation", *Association for the Advancement of Artificial Intelligence (AAAI)*, 2016.

[5] Tzu-Ming Harry Hsu, Wei-Yu Chen, Cheng-An Hou, **Yao-Hung Hubert Tsai**, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Unsupervised Domain Adaptation with Imbalanced Cross-Domain Data", *International Conference on Computer Vision (ICCV)*, 2015.

[4] Yuan-Ting Hsieh*, Shih-Yen Tao*, **Yao-Hung Hubert Tsai**, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Generalized Joint Distribution Adaptation on Heterogeneous Feature Space", *International Conference on Multimedia & Expo (ICME)*, 2016. (*equal contributions) **(Oral Presentation)**

[3] **Yao-Hung Hubert Tsai**, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Heterogeneous Domain Adaptation with Label and Structure Consistency", *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2016.

[2] **Yao-Hung Tsai***, Hung-Ming Hsu*, Cheng-An Hou and Yu-Chiang Frank Wang. "Person-specific Domain Adaptation with Applications to Heterogeneous Face Recognition", *International Conference on Image Processing (ICIP)*, 2014. (*equal contributions)

[1] Po-Chen Wu, **Yao-Hung Tsai** and Shao-Yi Chien. "Stable Pose Tracking from a Planar Target with an Analytical Motion Model in Real-time Applications", *International Workshop on Multimedia Signal Processing (MMSP)*, 2014.

Journal Publications

[1] Cheng-An Hou, **Yao-Hung Hubert Tsai**, Yi-Ren Yeh and Yu-Chiang Frank Wang. "Unsupervised Domain Adaptation with Label and Structural Consistency", *IEEE Transactions on Image Processing (TIP)*, 2016.

Pre-Prints

[1] **Yao-Hung Hubert Tsai**, Liang-Kang Huang, Ruslan Salakhutdinov. "Learning Robust Visual-Semantic Embeddings", *arXiv:1703.05908*, 2017.

Research Experiences

Carnegie Mellon University, Pittsburgh, PA, USA

- **Graduate Research Assistant**   *Aug 2016 - May 2021*
  - Researching in Deep Learning and its applications
  - *Advisor: Dr. Ruslan Salakhutdinov*

Microsoft Research, Redmond, WA, USA

- **Research Intern**   *May 2017 - Aug 2017*
  - Working on deep generative models
  - *Advisor: Dr. Nebojsa Jojic*

Research Center for Information Technology Innovation, Academia Sinica, Taipei, Taiwan

- **Research Assistant**   *Sep 2012 - Aug 2014, Aug 2015 - Aug 2016*
  - Working on projects for person re-identification, domain adaptation, and transfer learning
  - *Advisor: Dr. Yu-Chiang Frank Wang*

National Taiwan University, Taipei, Taiwan

- **Undergrad Student Researcher**   *Sep 2012 - Jun 2014*
  - Working on projects for augmented reality and real-time pose tracking
  - *Advisor: Dr. Shao-Yi Chien*

Teaching Experiences

Research Center for Information Technology Innovation, Academia Sinica, Taipei, Taiwan

- **Teaching Assistant**   *Aug 2015 - Aug 2016*
  - Providing Deep Learning tutorials/short courses for undergrad/grad students

Academic Talks

[1] **Yao-Hung Hubert Tsai** "Learning Visual and Semantic Embeddings for Low-Shot Setting", *Taiwanese Computer Vision Online Meetup*, May 2017.

Academic Services

Reviewer:

- ICML 2017, NIPS 2017

Honors & Awards

Department Undergrad Diploma Representative, National Taiwan University	*Jun 2014*
Presidential Award (3 times), National Taiwan University	*Feb 2011, Sep 2012, Feb 2014*
Best Tourism App Award, Chunghwa Telecom Hami Apps Competition	*Sep 2014*
Bronze Medal & Outstanding Paper Award, Altera Innovate Asia FPGA Design Competition	*Sep 2013*
Bronze Medal Award, Taiwan Semiconductor Manufacturing Company (TSMC) Elite Camp	*Sep 2012*