Yao-Hung (Hubert) Tsai

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✎ https://yaohungt.github.io

Research Interests

I'm interested in Deep Learning and its applications in Computer Vision, Natural Language Processing, and their intersection.

Education

Carnegie Mellon University, Pittsburgh, PA, USA   *Aug 2016 - May 2021*

- Ph.D. in Machine Learning within School of Computer Science

National Taiwan University, Taipei, Taiwan   *Aug 2010 - Jun 2014*

- B.S. in Electrical Engineering
  - *Department Representative to Receive Undergraduate Diploma*
  - *Ranked 9 out of 198 with 3 times Presidential Awards (top 5% each semester)*

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] 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)**

[5] **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.

[4] **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.

[3] 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.

[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.

Awards & Honors

Department of Electrical Engineering, National Taiwan University, Taipei, Taiwan
- **Presidential Award (3 times)**   *Feb 2011, Sep 2012, Feb 2014*
  - Awarded to students with the top 5% GPA for that semester
- **Department Representative to Receive Undergrad Diploma**   *Jun 2014*
  - Awarded to students with the top 5% GPA over all semesters

Research Experiences

Carnegie Mellon University, Pittsburgh, PA, USA
- **Graduate Research Assistant**   *Aug 2016 - May 2021*
  - Researching in Deep Learning, Computer Vision, and Natural Language Processing
  - *Advisor: Ruslan Salakhutdinov*

Research Center for Information Technology Innovation, Academia Sinica, Taipei, Taiwan
- **Research Assistant**   *Sep 2012 - Aug 2014, Aug 2015 - Aug 2016*
  - Worked on projects for person re-identification, domain adaptation, and zero-shot learning
  - *Advisor: Dr. Yu-Chiang Frank Wang*

National Taiwan University, Taipei, Taiwan
- **Undergrad Student Researcher**   *Sep 2012 - Jun 2014*
  - Worked on projects for augmented reality and real-time pose tracking
  - *Advisor: Dr. Shao-Yi Chien*

Work & Teaching Experience

Research Center for Information Technology Innovation, Academia Sinica, Taipei, Taiwan
- **Teaching Assistant & Mentor**   *Aug 2015 - Aug 2016*
  - Mentoring undergrad/grad students for the independent research
  - Providing Deep Learning tutorial/short course for undergrad/grad students

Republic of China Air Force, Hsinchu, Taiwan
- **Political Warfare Officer**   *Aug 2014 - Jul 2015*
  - Compulsory military service in Taiwan

Other Awards

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*

References

Dr. Ruslan Salakhutdinov

Associate Professor, Carnegie Mellon University

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Dr. Yu-Chiang Frank Wang

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Dr. Shao-Yi Chien

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