TZU-MING HARRY HSU

Computer Science and Artificial Intelligence Laboratory, MIT
2 nd year Ph.D. Student in the Department of Electrical Engineering and Computer Science

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PUBLICATIONS

👥 Conference Proceedings

- **3D–Aware Scene Manipulation via Inverse Graphics**
  Tzu–Ming Harry Hsu*, Shunyu Yao*, Jun–Yan Zhu, Jiajun Wu, Antonio Torralba, William T. Freeman, and Joshua B. Tenenbaum. NIPS 2018

- **Learning Food Quality and Safety using Wireless Stickers**
  Unsoo Ha, Yunfei Ma, Zexuan Zhong, *Tzu–Ming Harry Hsu*, and Fadel Adib. Hotnets 2018

- **Transfer Neural Trees for Heterogeneous Domain Adaptation**
  Wei–Yu Chen, *Tzu–Ming Harry Hsu*, Yao–Hung Hubert Tsai, and Yu–Chiang Frank Wang. ECCV 2016

- **Unsupervised Domain Adaptation With Imbalanced Cross–Domain Data**
  Tzu–Ming Harry Hsu, Wei–Yu Chen, Cheng–An Hou, Yao–Hung Hubert Tsai, Yi–Ren Yeh, and Yu–Chiang Frank Wang. ICCV 2015

- **Connecting the Dots Without Clues: Unsupervised Domain Adaptation for Cross–domain Visual Classification**
  Wei–Yu Chen, *Tzu–Ming Harry Hsu*, Cheng–An Hou, Yi–Ren Yeh and Yu–Chiang Frank Wang. ICIP 2015

RESEARCH EXPERIENCE

Clinical Decision Making Group
Prof. Peter Szolovits

📅 Jul 2018 – Ongoing   📍 MIT CSAIL

- Unsupervised Alignment of Medical Radiology Data and Clinician Reports

Computer Vision Group

📅 Feb 2018 – June 2018   📍 MIT CSAIL

- 3D–aware Inverse–Graphics

Signal Kinetics Lab
Prof. Fadel Adib

📅 Sep 2017 – Jan 2018   📍 MIT Media Lab

- Mobile Localization in LTE Cellular Network
- Food Quality and Content Detection with Wireless Signal

Multimedia and Machine Learning Lab
Prof. Yu–Chiang Wang

📅 Apr 2014 – Jun 2016   📍 Academia Sinica, Taiwan

- Unsupervised Domain Adaptation with Imbalanced Cross–domain Data
- Deep Learning for Heterogeneous Domain Adaptation

HIGHLIGHT

🏆 *Ranked #1 in IPhO*
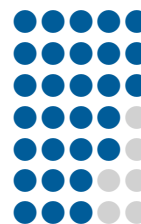*International Physics Olympiad 2011 with 400+ participants*

👤 *2 years in Startup*
Bite! App with 50k users and 100k food diaries

STRENGTHS

Machines Learning   ML for Healthcare
Computer Vision   Signal Processing

SKILLS

TensorFlow	●●●●●
PyTorch	●●●●●
Docker	●●●●●
C/C++	●●●●○
MATLAB	●●●●○
Java	●●●○○
HTML/CSS/JS	●●●○○

EDUCATION

Ph.D. Student in Computer Science
Massachusetts Institute of Technology

📅 Sep 2017 – Ongoing

B.S.E. in Electrical Engineering
National Taiwan University

📅 Sep 2011 – Jun 2016

Class Rank: 1/190   GPA: 3.99/4.00

B.S. in Physics
National Taiwan University

📅 Sep 2012 – Jun 2016

RESEARCH EXPERIENCE (CONT'D)

Access IC Lab
Prof. An–Yeu Andy Wu

📅 Sep 2014 – Jun 2015   📍 NTU, Taiwan

- Noise Removal of Photoplethysmographic Signals

Laboratory for Applied Logic and Computation in System Design (ALCom Lab)
Prof. Jie–Hong Roland Jiang

📅 Jul 2013 – Jun 2014   📍 NTU, Taiwan

- Continuous–Time Mathematical Models for Neurons

AWARDS

Altera Innovate Asia FPGA Design Competition
Silver Medal

📅 2015

- Designed a custom PCB for music modulation and user sporting statistics

ICASSP Signal Processing Cup
Tenth Place

📅 2015

- Ranked 10th globally in heartbeat detection for sports

International Physics Olympiad (IPhO)
First Place Overall, in Theory, and in Experiment

📅 2011

- Ranked 1st in both theory section and experiment section among 401 international representatives from over 80 countries

International Junior Science Olympiad (IJSO)
Gold Medal

📅 2008

- Ranked top 10% among 300 international representatives from over 60 countries

LEADERSHIP

MIT Taiwanese Student Association
President

📅 May 2018 – Ongoing

NTU Toastmasters Club
Public Relations/Member Vice President

📅 Mar 2014 – Feb 2015

WORK EXPERIENCE

Digital Drift Corporation
Lead Data Scientist

📅 Mar 2016 – Ongoing