

TZU-MING HARRY HSU

2nd year Ph.D. Student, Computer Science and Artificial Intelligence Laboratory, MIT

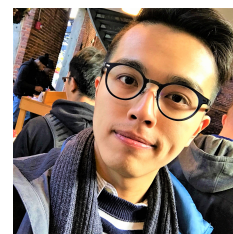
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EDUCATION

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

📅 Sep 2017 – Ongoing

📍 Cambridge, MA

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

📅 Sep 2011 – Jun 2016

📍 Taipei, Taiwan

Class Rank: 1/190

GPA: 3.99/4.00

B.S. in Physics
National Taiwan University

📅 Sep 2012 – Jun 2016

📍 Taipei, Taiwan

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.
NeurIPS 2018
- **Unsupervised Multimodal Representation Learning across Medical Images and Reports**
Tzu-Ming Harry Hsu, Wei-Hung Weng, Willie Boag, Matthew McDermott, and Peter Szolovits. ML4H, NeurIPS 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

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

Computer Vision

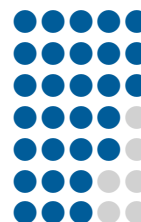
ML for Healthcare

Machine Learning

Signal Processing

SKILLS

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



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 – Jul 2017

Ministry of National Defense, Taiwan
Military Service

📅 Jul 2016 – Jun 2017

RESEARCH EXPERIENCE

Clinical Decision Making Group (MEDG)

Prof. Peter Szolovits

📅 Jul 2018 – Ongoing

📍 MIT CSAIL

- Beyond Full Supervision for Uncovering Underlying Structure of Medical Radiology Data and Clinician Reports

Computer Vision Group

📅 Feb 2018 – June 2018

📍 MIT CSAIL

- Use 3D-aware Vision as Inverse-graphics for Image Editing

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

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