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. In: NIPS 2018
- Learning Food Quality and Safety using Wireless Stickers. Unsoo Ha, Yunfei Ma, Zexuan Zhong, Tzu-Ming Harry Hsu, and Fadel Adib. In: 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. In: ECCV 2016
- Unsupervised Domain Adaptation With Imbalanced Cross-Domain
 - Tzu-Ming Harry Hsu, Wei-Yu Chen, Cheng-An Hou, Yao-Hung Hubert Tsai, Yi-Ren Yeh, and Yu-Chiang Frank Wang. In: 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. In: ICIP 2015

RESEARCH EXPERIENCE

Clinical Decision Making Group

Prof. Peter Szolovits

H 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

Sep 2012 - Jun 2016

National Taiwan University

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 Worldwide

2015

• Ranked 10th globally in heartbeat detection for sports

International Physics Olympiad (IPhO)

First Place Worldwide

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