# TZ-YING (GINA) WU

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#### **EDUCATION**

Ph.D. in Electrical and Computer Engineering

Sep. 2018 - present

University of California San Diego (UCSD), USA Advisor: Prof. Nuno Vasconcelos, GPA: 3.88/4.0

Master of Science in Electrical Engineering

Feb. 2016 - Jan. 2018

National Tsing Hua University (NTHU), Taiwan

Advisor: Prof. Min Sun, GPA: 4.27/4.3

Bachelor of Science in Electrical Engineering Sep. 2012 - Jan. 2016

National Tsing Hua University (NTHU), Taiwan

GPA: 4.02/4.3, ranking: 10/99 (graduated a half-year earlier)

#### RESEARCH INTEREST

### Computer Vision and Deep Learning

learning with rejection, taxonomic classification, long-tail recognition, scene understanding, representation learning, multi-modal fusion, multi-task learning, continual learning

# **PUBLICATION**

Solving Long-tailed Recognition with Deep Realistic Taxonomic Classier

ECCV 2020

Tz-Ying Wu, Pedro Morgado, Pei Wang, Chih-Hui Ho, and Nuno Vasconcelos

Explainable Object-induced Action Decision for Autonomous Vehicles

CVPR 2020

Yiran Xu, Xiaoyin Yang, Lihang Gong, Hsuan-Chu Lin, **Tz-Ying Wu**, Yunsheng Li, Nuno Vasconcelos

Exploit Clues from Views: Self-Supervised and Regularized Learning for Multiview Object Recognition

CVPR 2020

Chih-Hui Ho, Bo Liu, Tz-Ying Wu, Nuno Vasconcelos

Liquid Pouring Monitoring via Rich Sensory Inputs

ECCV 2018

Tz-Ying Wu\*, Juan-Ting Lin\*, Tsun-Hsuang Wang, Chan-Wei Hu, Juan Carlos Niebles, Min Sun

Anticipating Daily Intention using On-Wrist Motion Triggered Sensing

ICCV 2017

Tz-Ying Wu\*, Ting-An Chien\*, Cheng-Sheng Chan, Chan-Wei Hu, Min Sun (spotlight presentation)

### **DEMO**

Recognition from Hand Cameras: A Revisit with Deep Learning

ACCV 2016

Cheng-Sheng Chan, Ting-An Chien, Tz-Ying Wu, Min Sun

#### **SKILLS**

**Programming Languages:** Python, C/C++, MATLAB, Verilog, Assembly

Library & OS: Caffe, PyTorch, Tensorflow, Numpy, Pandas, Matplotlib, OpenCV, LATEX, Linux

Languages: English, Chinese

#### HONORS AND DISTINCTIONS

UCSD Electrical and Computer Engineering Department Fellowship	Fall 2018
Appier Scholarship for attending international conference	Fall 2017
NTHU EECS Scholarship for attending international conference	Fall 2017
CVGIP 2017 Excellent Paper Award	$Summer\ 2017$
NTHU EE Admission Scholarship for outstanding students	Fall 2016
NTHU EECS Scholarship for outstanding students	Fall 2014
Jia-Bin Chen Scholarship for outstanding students in EE	Fall 2014
NTHU scholarship for academic excellence	Fall 2013
Breaking records in athletics of NTHU on three occasions	Fall 2012 - Spring 2013

#### WORK EXPERIENCE

# IMEC-Taiwan CO. R&D department

Summer 2015

Signal Processing Intern

Designed and implemented neuron-signal generator, encoder, and decoder framework.

## RESEARCH EXPERIENCE

Graduate Student Researcher, Statistical Visual Computing Lab, UCSD 2018 - present Working on learning with rejection, taxonomic classification and scene understanding problems.

# Graduate Research Assistant, Vision Science Lab, NTHU

2016 - 2018

Developed wearable camera and IOT system with embedded boards.

Conducted deep learning experiments for learning human behaviors using multi-modal fusion.

## Undergraduate Research, advised by Prof. Jing-Jia Liou, NTHU

2014 - 2015

FPGA Design of Accelerators with High-level Evaluation and Synthesis Tools

# TEACHING EXPERIENCE

# Teaching Assistant, UCSD

Statistical Learning II

Winter 2019

# Teaching Assistant, NTHU

Deep Learning Lab	UNITEC - NTHU Summer School 2017
Signals and Systems	Spring 2016, 2017
Introduction to Programming $(C/C++)$	Fall 2015

### OTHER EXPERIENCE

Student volunteer	ACCV 2016, ICCV 2017
Member of EE student association of academic affair	2014 - 2015, 2012 - 2013
Team leader in the NTHUEE womens basketball team	2014 - 2015
Assisting in holding 2014 NTHU International Week	Spring 2014
Member of NTHU track and field team	2012 - 2013