# YU-YING YEH

(+886) 972-796-768 • yuyeh@eng.ucsd.edu • yuyingyeh.github.io

#### **EDUCATION**

Master's Student, Computer Science and Engineering

La Jolla, CA

National Tsing Hua University (NTHU)

Non-matriculated Status, Computer Science, Overall GPA: 4.30/4.30

National Chiao Tung University (NCTU)

Non-matriculated Status, Computer Science, Overall GPA: 4.30/4.30

Sep. 2016 - Jan. 2017

Hsinchu, Taiwan

Hsinchu, Taiwan

National Taiwan University (NTU)

University of California San Diego (UCSD)

B.Sc. in Physics and B.A. in Economics, Overall GPA: 3.80/4.30

Sep. 2010 - Jun. 2015 Taipei, Taiwan

Sep. 2018 - Present

· Computer Science Courses:

Data Structures, Design and Analysis of Algorithms, Operating Systems, Computer Architecture

· Mathematics Courses:

Calculus, Linear Algebra, Statistics, Differential Equations, Advanced Statistical Inference

- · Award: Excellent Work in 2011 Competition for Innovative Experiments in General Physics
- · MOOC: Machine Learning (Coursera, NTU), Computer Programming (NTU OpenCourseWare)

#### RESEARCH EXPERIENCE

Vision and Learning Lab, National Taiwan University Multimedia and Machine Learning Lab, Academia Sinica Research Assistant, Supervised by Prof. Yu-Chiang Frank Wang

Sep. 2017 - Aug. 2018 Oct. 2016 - Aug. 2017 Taipei, Taiwan

- · Completing Videos from a Deep Glimpse
  Generated full-length videos given frames occurring on specific timing
  Leveraged image-based and temporal-based deep generative models and recurrent neural networks
- · Detach and Adapt: Learning Cross-Domain Disentangled Deep Representation [1]
  First work to address adaptation of feature disentanglement and learn cross-domain disentangled representation
  Conducted cross-domain image synthesis and translation given attribute information
- · A Unified Feature Disentangler for Multi-Domain Image Translation and Manipulation Learned domain-invariant representation with a unified architecture for multiple domains.
- · Single-Image Depth Estimation with Semantics Consistency
  Exploited image semantics for improved disparity estimation from monocular images.
- · Award: First Place Award in GAN Project Competition 2017, Ministry of Science and Technology, Taiwan

#### **PUBLICATION**

- [1] Y.-C. Liu, <u>Y.-Y. Yeh</u>, T.-C. Fu, S.-D. Wang, W.-C. Chiu, & Y.-C. F. Wang. Detach and Adapt: Learning Cross-Domain Disentangled Deep Representation. In *Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018. (Spotlight Presentation)
- [2] Y.-J. Li, F.-E. Yang, Y.-C. Liu, <u>Y.-Y. Yeh</u>, X. Du, & Y.-C. F. Wang. Adaptation and Re-Identification Network: An Unsupervised Deep Transfer Learning Approach to Person Re-Identification. In *IEEE Conference on Computer Vision and Pattern Recognition Workshops (CVPR workshop)*, 2018.
- [3] A. Liu, Y.-C. Liu, Y.-Y. Yeh, Y.-C. F. Wang. Anonymous Paper Title. In Conference on Neural Information Processing Systems (NIPS), 2018. (under review)

#### TEACHING EXPERIENCE

Deep Learning Crash Course for New Lab Members, National Taiwan UniversityJul. 2018Lecturer of Introduction to Neural Network and Convolutional Neural NetworkTaipei, TaiwanDeep Learning for Computer Vision, National Taiwan UniversityMar. 2018 - Jun. 2018Teaching Assistant, Instructed by Prof. Yu-Chiang Frank WangTaipei, TaiwanAlgorithms, National Taiwan UniversitySep. 2017 - Jan. 2018Teaching Assistant, Instructed by Prof. Yu-Chiang Frank WangTaipei, Taiwan

#### SELECTED PROJECTS

# **Intelligent Conversational Bot**

Feb. 2017 - Jun. 2017

Group project, Instructed by Prof. Yun-Nung Vivian Chen

Dept. of CSIE, NTU

- · Designed and built DoctorBot for answering questions related to hospitals and common symptoms and conducting reservation requests by using Python and TensorFlow toolkit
- · Leveraged reinforcement learning and combine Language Understanding, Dialogue Management and Natural Language Generation to train task-oriented bot

# **Operating Systems**

Sep. 2016 - Jan. 2017

Course project, Instructed by Prof. Jerry Chou

Dept. of Computer Science, NTHU

· Improved NachOS, implemented by C++, by adding system call, supporting multi-programming, implementing process scheduling algorithm and supporting file system

# Computer Architecture

Sep. 2016 - Jan. 2017

Course project, Instructed by Prof. Ting-Ting Hwang

Dept. of Computer Science, NTHU

- · Realized system call, loop, and function call using MIPS assembly language
- · Implemented indexing algorithm design for processor cache

# Numerical Analysis and Programming

Feb. 2013 - Jun. 2013

Course project, Instructed by Prof. Ying-Jer Kao

Dept. of Physics, NTU

· Used Python and Scipy to model gravitational field and found best trajectories for moving object

#### WORK EXPERIENCE

# Cathay United Bank

Aug. 2015 - Jun. 2016

Assistant Structured Product Manager

Taipei, Taiwan

- $\cdot$  Developed structured products to satisfy clients demand by analyzing market trend
- · Built automatic cash flow calculator for products from Reuters database with Excel VBA

### POSITION OF RESPONSIBILITY

# NTU Physics Volleyball Team

Feb. 2012 - Jun. 2013

Captain

Taipei, Taiwan

- · Scheduled training courses and instructed core knowledge of volleyball to members
- · Led team in college-wide games held in different cities in Taiwan

# Night of Physics: an annual department-wide performance Director

Sep. 2011 - Mar. 2012

Taipei, Taiwan

· Spearheaded a team of 70 people to successfully conduct 4-hour performance in student center with more than 300 attendees. Efficiently organized meetings with group leaders and communicated among groups.

#### TECHNICAL STRENGTHS

Computer Languages C/C++, Python(TensorFlow), Octave/Matlab, VBA

Software & Tools Stata, HTML, Excel, LATEX

Languages Chinese Mandarin (Native), English (Fluent), Japanese (Basic)