# YU-YING YEH

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#### **EDUCATION**

National Tsing Hua University (NTHU)

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

Sep. 2016 - Jan. 2017 *Hsinchu, Taiwan* 

National Chiao Tung University (NCTU)

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

Sep. 2016 - Jan. 2017 *Hsinchu, Taiwan* 

National Taiwan University (NTU)

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

Sep. 2010 - Jun. 2015 Taipei, Taiwan

· 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 - Present Oct. 2016 - Aug. 2017 Taipei, Taiwan

- · Single-Image Depth Estimation with Semantics Consistency [1] Exploited image semantics for improved disparity estimation from monocular images.
- · Detach and Adapt: Learning Cross-Domain Disentangled Deep Representation [2]
  First work to address adaptation of feature disentanglement and learn cross-domain disentangled representation
  Achieved state-of-the-art accuracy in unsupervised domain adaptation
  Conducted cross-domain image synthesis and translation given attribute information
- · Few Frame Guided Video Generation and Inpainting
  Generated full-length videos given frames occurring on specific timing
  Leveraged deep generative models, sequence-to-sequence model, and the concept of mutual information
- · Award: First Place Award in GAN Project Competition 2017, Ministry of Science and Technology, Taiwan

# **PUBLICATION**

- [1] P.-Y. Chen, Y.-C. Liu, <u>Y.-Y. Yeh</u>, & Y.-C. F. Wang. Single-Image Depth Estimation with Semantics Consistency. (under review in ICIP 2018)
- [2] Y.-C. Liu, Y.-Y. Yeh, T.-C. Fu, W.-C. Chiu, S.-D. Wang, & Y.-C. F. Wang. Detach and Adapt: Learning Cross-Domain Disentangled Deep Representation. In Conference on Computer Vision and Pattern Recognition (CVPR 2018), 2018.

#### TEACHING EXPERIENCE

# Algorithms, National Taiwan University

Teaching Assistant, Instructed by Prof. Yu-Chiang Frank Wang

Sep. 2017 - Present

Taipei, Taiwan

- · Designed assignments including handwriting questions and programming problems for 70 students
- · Reviewed handwriting answers and verified codes by writing shell scripts
- · Offered TA session every week and helped students understand materials in class

#### SELECTED PROJECTS

#### Intelligent Conversational Bot

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

Feb. 2017 - Jun. 2017

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

- · 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)