YUAN-FANG (YUAN) LIN

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EDUCATION

Columbia University

New York, NY

M.S. in Computer Science (Machine Learning Track)

Aug 2018 - Dec 2019

National Taiwan University (NTU)

Taipei, TW

B.S. in Electrical Engineering (GPA: 3.7/4.0)

Sep 2013 - Jan 2018

University of Pennsylvania

Philadelphia, PA

Institute of Academic Studies Program (GPA: 4.0/4.0)

Jul 2015 - Aug 2015

PROFESSIONAL EXPERIENCES

Columbia University, Digital Video Multimedia Laboratory

New York, NY

Graduate Research Assistant — Advisor: Prof. Shih-Fu Chang

Sept 2018 - Present

- Focus on detection of GAN-generated images and leverage GAN to combat adversarial examples
- Design classifier of the genuine or GAN-generated images

CITI, Academia Sinica, Multimedia and Machine Learning Laboratory

Taipei, TW

Undergraduate Researcher — Advisor: Prof. Yu-Chiang (Frank) Wang

Feb 2017 - Jan 2018

- Proposed unique architecture for joint learning 3D voxels and associated disentangled features from single 2D image
- Achieved 49.1% accuracy and performed against state-of-the-art fully-supervised methods
- Outperformed state-of-the-art method with 9.9% in IoU without additional pose info in weakly-supervised setting

NTU, Speech Processing and Machine Learning Laboratory

Taipei, TW

Undergraduate Researcher — Advisor: Prof. Hung-Yi Lee

Aug 2016 - Jan 2018

- Proposed comprehension network intended to reach 53.9% accuracy on TOEFL Listening Comprehension Dataset
- Focused on comprehension network, variational autoencoder, semantic analysis and deep learning

Fusion Next Inc. (Startup)

Taipei, TW

Android Application Developer Internship

Jul 2016 - Aug 2016

Built up application for dashboard camera and assisted user interface designing

ACADEMIC PROJECTS

Transfer Learning on Stack Exchange Tags

[Python, Pytorch, Scikit-Learn, NLTK]

Final Project in Machine Learning, NTU

2016

2016

- Ranked No. 6 in class (over 200 students) / Top 23% in worldwide Kaggle competition
- Utilized transfer learning and predicted tags from model trained on unrelated topics

Real-Time Dormitory Washing Machine Surveillance System

[Java, JavaScript, CSS3/HTML5]

Final Project in Embedded System, NTU

• Implemented real-time surveillance system of washing machines' status with website and mobile-app client-ends

Customized Vocabulary-Learning Dictionary

[NodeJS, ReactJS, CSS/HTML, MySQL]

Final Project in Website Programming, NTU

2016

• Developed dictionary helping building up vocabulary list and provided customized test according to familiarity

Functionally Reduced And-Inverter Graph (FRAIG)

[C++, Unix, Shell script]

Final Project in Data Structure and Programming, NTU

2015

· Implemented hash structure of circuit to identify functionally equivalent pairs and support optimization and simulation

SKILLS

Programming Languages

Python, C/C++, MATLAB, Java, ReactJS, NodeJS, MySQL, CSS3/HTML5, LATEX

Tools and Technologies

PyTorch, TensorFlow, Keras, Git, Unix/Linux

Languages Mandarin Chinese (Native), Taiwanese (Native), Spanish (Good Command)