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*

SKILLS

Programming Languages	Python, C/C++, MATLAB, Java, ReactJS, NodeJS, MySQL, CSS3/HTML5, LaTeX
Tools and Technologies	PyTorch, TensorFlow, Keras, OpenCV, Firebase, Git, Unix/Linux
Languages	Mandarin Chinese (Native), Taiwanese (Native), Spanish (Basic)

PROFESSIONAL EXPERIENCES

Columbia University, Digital Video Multimedia Laboratory — New York, NY
Graduate Research Assistant — Advisor: Prof. Shih-Fu Chang — *Sep 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*

- 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 — *2016*

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

Customized Vocabulary-Learning Dictionary — [NodeJS, ReactJS, CSS3/HTML5, MySQL]
Final Project in Website Programming, NTU — *2016*

- Developed dictionary to help increase vocabulary list and provide 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