YUAN-FANG LIN

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EDUCATION

Columbia University in the City of New York — New York, United States
M.S. in Computer Science — *Sept. 2018 - Present*

National Taiwan University — Taipei, Taiwan
B.S. in Electrical Engineering (GPA: 3.7/4.0) — *Sept. 2013 - Jan. 2018*

University of Pennsylvania — Philadelphia, United States
Institute of Academic Studies Program (GPA: 4.0/4.0) — *July 2015 - Aug. 2015*

PROFESSIONAL EXPERIENCES

Multimedia and Machine Learning Laboratory — CITI, Academia Sinica, Taiwan
Undergraduate Research Assistant — 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
- Achieved IoU as 25.6% in weakly-supervised setting which outperforms state-of-the-art methods with 9.9% without additional pose information

Speech Processing and Machine Learning Laboratory — National Taiwan University
Undergraduate Research Assistant — 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

Digital Image and Signal Processing Laboratory — National Taiwan University
Undergraduate Research Assistant — Advisor: Prof. Jian-Jiun Ding — *Aug. 2016 - Jan. 2017*

- Focused on Optimized Edge/Corner Detection, including noise removal and brightness control algorithms

Fusion Next Inc. (Startup) — Taipei, Taiwan
Android Application Developer Internship — *July 2016 - Aug. 2016*

- Assisted user interface designing and built up application for dashboard camera

PROJECTS EXPERIENCES

Transfer Learning on Stack Exchange Tags — [Python, Pytorch, Scikit-Learn]
Final Project in Machine Learning class — *2016*

- **Rank 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, CSS/HTML]
Final Project in Embedded System Laboratory — *2016*

- Implemented real-time surveillance system of washing machines' status with Website and Application client-ends.

Customized Vocabulary-Learning Dictionary — [NodeJS, ReactJS, CSS/HTML, MySQL]
Final Project in Web-Programming Special Project class — *2016*

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

Functionally Reduced And-Inverter Graph (FRAIG) — [C++, Unix]
Final Project in Data Structure and Programming class — *2015*

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

TECNICAL SKILLS

Programming Languages	Python, C/C++, MATLAB, Java, LaTeX, ReactJS, NodeJS, MySQL
Tools and Technologies	PyTorch, TensorFlow, Keras, Git, Linux
Languages	Mandarin Chinese(Native), English(Fluent), Spanish(Good Command), Taiwanese(Native)