Po-Chih (Brian) **Huang**

🏠 pochih.github.io | 🐙 pochih | ✉ brianhuang1019@gmail.com | 🔗 pochih

Education

National Taiwan University   *Taipei, Taiwan*
M.S. IN COMPUTER SCIENCE & INFORMATION ENGINEERING   *Sept. 2016 - Aug. 2018*
- Advised by Prof. Pu-Jen Cheng
- Average GPA: **4.20/4.3**

National Taiwan University   *Taipei, Taiwan*
B.S. IN COMPUTER SCIENCE & INFORMATION ENGINEERING   *Sept. 2012 - June 2016*
- Be the third-place winner of the *Presidential Award* in Senior
- Last 60 GPA: **4.08/4.3**

Research

Sentiment Analysis   *Python & Pytorch*
- Master thesis focus on *Targeted Sentiment Analysis*, my method reaches the latest state-of-the-art
- Survey and review sentiment analysis papers from top conferences, include but not limited to ACL / EMNLP / COLING / NIPS / AAAI
- Research repository can found at https://github.com/pochih/SA-papers

Rethink generalization of Deep Learning   *Python & Keras*
- Dig deep into the generalization ability, conclude that the neural network will learn patterns first, and memorize noises later
- Report can found at https://ntumlds.wordpress.com/2017/03/27/r05922018_drliao

Projects

Reinforcement Learning Chatbot   *Python & Tensorflow*
- Train the chatbot with a seq2seq model until convergence, then leverage reinforcement learning to generate more interesting results
- **100+** Stars on Github. Code can found at https://github.com/pochih/RL-Chatbot

Image Retrieval   *Python & Pytorch*
- Extract features from a query image, represent it on a lower dimensional space, and retrieve the most similar image from database
- Code can found at https://github.com/pochih/CBIR

Video Captioning   *Python & Tensorflow*
- Extract video features from pretrained VGG net, feed it into an encoder-decoder model constructed with two LSTMs for text generation
- Code can found at https://github.com/pochih/Video-Cap

Semantic Segmentation   *Python & Pytorch*
- Reproduce CVPR 2015 best paper honorable mention, use fully convolutional networks to predict pixel-wise label of self-driving car
- Code can found at https://github.com/pochih/FCN-pytorch

Employment

National Taiwan University   *Taipei, Taiwan*
TEACHING ASSISTANT   *Sep. 2017 - Feb. 2018*
- Course: *EE5184* Machine Learning, taught by Prof. Hung-yi Lee

HTC   *Taipei, Taiwan*
SUMMER INTERN   *Jul. 2017 - Aug. 2017*
- Implement deep learning training platform

Skills

LANGUAGES

Python	Use it for data analyzing & projects demoing

TOOLS

Pytorch	Use it to train complex networks
Tensorflow	Use it when efficiency is highly concerned
Keras	Use it for quick deep learning experiments