

YICHEN PAN

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EDUCATION

Carnegie Mellon University - Information Networking Institute

Master of Science in Information Networking

GPA: N.A.

Relevant courses: Computer Systems (15513), Machine Learning (10601), Deep Learning (11785), Search Engines (11642)

Pittsburgh, PA

Expected May 2019

The University of Nottingham Ningbo China

BSc Hons Computer Science (First Class)

GPA: 4.0/4.0 (1/46)

Ningbo, China

Aug. 2013 - Jul. 2017

INDUSTRY EXPERIENCE

Alibaba Group

Algorithm Engineer Intern

Jun.-Sep. 2016

Hangzhou, China

- Developed an automatic mobile-based speaker verification system based on acoustic modeling.
- Implemented several state-of-art **machine learning** approaches, including GMM-UBM, I-vector, JFA based on Kaldi framework.
- Proposed optimization based on DTW and highly representative feature d-vector from **DNN**.
- Designed an intelligent robot capable of face recognition, access system control, light control and human interaction, with the funding from GNomeMagic Lab based on Raspberry Pi, Open CV and Qt. (**Best project** in 2016 Summer Hackathon at Taobao)

PROJECTS/LEADERSHIP EXPERIENCE

QuickNote

Project Leader, Full-stack Developer

Oct. 2015 - Present

<http://quicknote.org>

- Self-initiated **open-source** project.
- Designed a scientific cross-platform note-taking application which highly supports multimedia based on **MEAN stack** and **node-webkit** technique.
- Fully in charge of both front-end and back-end and led the team to complete a full cycle of the software engineering process.
- Deployed at the University of Nottingham as **Open Education Resource**, and used by the Digital Media Research Team for data mining.

Redundancy Detection Based on Word Embeddings

NVIDIA Joint-Lab: Research Assistant

Oct. 2015 - Sep. 2016

<http://panatopos.com/homepage.html#redundancydetection>

- Proposed a novel redundant event filtering system based on the dense word embedding scheme (word2vec) incorporated with the distributed word movers distance metric in **Python**.

Feature Extraction via Random Recurrent Deep Ensembles and its Application in Group-level Happiness Estimation

Undergraduate thesis

Sep. 2016 - May. 2017

<https://github.com/PAN001/GREP>

- Designed a CNN and LSTM based ensemble framework (RRDE) to extract highly discriminative feature representation of image in **Python Tensorflow and Keras**, and applied RRDE for group-level happiness intensity prediction in wild.
- Best result yielded a 0.55 root-mean-square error (RMSE) on validation set of HAPPEI dataset, close to first place in 2016 EmotiW competition.

SELECTED HONORS/AWARDS

President Award for Outstanding Graduate, The University of Nottingham (1 in 5)

Jun. 2017

SIGSOFT CAPS-UG Award, ACM SIGSOFT

Mar. 2017

Best Student of the Year, The University of Nottingham (Best student in each department)

Dec. 2016

President's Scholarship, The University of Nottingham (Top 1%)

Dec. 2016

China National Scholarship, Ministry of Education of The People's Republic of China

Nov., 2016

Provost's Scholarship, The University of Nottingham (Top 1.5%)

Dec. 2015

PUBLICATION

Towey D., Pan Y., Qu Y. *Students as Partners in a Multi-media Note-taking App Development: Best Practices*. International Conference on Software Engineering (ICSE) 2017: 334-335

Tang S., Pan Y. *Feature Extraction via Recurrent Random Deep Ensembles and its Application in Group-level Happiness Estimation*. CoRR abs/1707.09871 (2017)

SKILLS

Computer Languages

Python, C/C++, Java, Bash, Matlab, MEAN Stack, Haskell

Tools

Unix, Scikit-learn, OpenCV, Keras, TensorFlow, Kaldi

Databases

MySQL, MongoDB