

# YICHEN PAN

(412) 616-6850 ◇ panatopos@cmu.edu ◇ <http://panatopos.com> ◇ <https://linkedin.com/in/yichenpan/>

## EDUCATION

### Carnegie Mellon University - Information Networking Institute

Master of Science in Information Networking

Relevant Courses: Computer Systems, Cloud Computing, Distributed System, Database, Deep Learning, Search Engines

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

## SKILLS

<b>Computer Languages</b>	Java, Python, Javascript, C/C++, Golang, Bash, Matlab, MEAN Stack, Haskell, R
<b>Tools</b>	Unix, Pytorch, TensorFlow, Keras, Scikit-learn, OpenCV
<b>Databases</b>	MySQL, MongoDB, Redis, Cassandra

## INTERNSHIP EXPERIENCE/PROJECTS

### LinkedIn

Software Developer Engineer Intern

May.-Aug. 2018

San Francisco, CA

- Frontend software engineering for LinkedIn's Document player (SlideShare player): maintenance, feature enhancement and performance optimization (Vanilla JS).
- Full-stack software engineering for Document re-uploading on LinkedIn Share Posts with attached Documents: implementing end-to-end flow for users to re-upload files and edit for the posted posts (EmberJS, Java)

### Alibaba Group

Algorithm Engineer Intern

Jun.-Sept. 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)

### QuickNote

Project Leader, Full-stack Developer

Oct. 2015 - Present

<http://quicknote.org>

- Self-initiated **open-source** project, main contributor and maintainer.
- 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**

### PanFS: a high-throughput and low-latency distributed file system

Jan. 2018 - May. 2018

- Based on Facebook's Haystack, implemented a high-throughput and low-latency distributed file system using Golang.
- Deployed as distributed file storage system for QuickNote in practice.

### Lucene based Search Engine development

Sep. 2017 - Dec. 2017

- Developed a Lucene based search engine in **Java** with supports boolean retrieval, ranked retrieval (BM25 and Indri), structured query retrieval, query expansion (i.e., pseudo relevance feedback), learning to rank (using rankSVM) and diversification (PM-2 and xQuAD).

### Feature Extraction via Random Recurrent Deep Ensembles

Sep. 2016 - May. 2017

- 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.
- Applied the proposed framework in wild Group-level Happiness Estimation task, and 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