

# Ting (Rachel) Pan

+1 (732) 810-9827 • [tingp@andrew.cmu.edu](mailto:tingp@andrew.cmu.edu) • [tingpan.github.io](https://tingpan.github.io)

## EDUCATION

### Carnegie Mellon University - Information Networking Institution

Master of Science in Information Networking (MSIN), 3.85/4.0

Core Courses: Parallel Computing (TA), Computer Networks, Advanced Cloud Computing, Distributed System

Pittsburgh, USA

Aug. 2017 - Dec. 2018

### University of Nottingham - School of Computer Science

BSc (Hons) Computer Science, 4.0/4.0, Best Student

Nottingham, UK

Sept. 2013 - Jun. 2017

## TECHNICAL SKILLS

- o **Proficient:** Java, Android, JavaScript (React, Angular, Node), HTML, CSS, SQL/NoSQL
- o **Intermediate:** C, C++, CUDA, Python, Go, Objective-C, Ruby on Rails
- o **Tools:** \*nix, Git, MATLAB,  $\LaTeX$ , AWS, Hadoop, Spark, Sketch

## EXPERIENCE

### SDE intern at WhatsApp Inc. Web Team

React, React Native, Objective-C

Menlo Park, USA

May. 2018 - Aug. 2018

- o Built confidential but substantial features for WhatsApp, landed 85 diffs.

### Research Developer Intern at Microsoft Research Asia System Algorithm Group

Intern Leader, Java, Android

Beijing, China

Jun. 2016 - Oct. 2016

- o Developed a navigation SDK in Java and built [Microsoft PathGuide](#) with the SDK. Improved 50% of the navigation speed by optimizing the concurrent performance.

### SDE Intern at Logobrand

JavaScript, Ionic, Firebase, Android

Nottingham, UK

Oct. 2015 - May. 2016

- o Built a hybrid photo synchronization App and an instant message App with RESTful API and MVVM pattern.

### SDE Intern at [Zhiren.com](#)

Start-up, JavaScript, HTML, CSS, Ruby on Rails

Remote & Chengdu, China

Jun. 2015 - Oct. 2015

- o Built the first release of a cloud HR management service [Zhiren](#).

### Research Assistant at Mixed-Reality Lab

Full Stack, Node.js, JavaScript, Elasticsearch, D3.js

University of Nottingham

Jun. 2015 - Jul. 2015

- o Implemented a music search system with Million Song Dataset. Visualized music data interactively with D3.

## SELECTED PROJECTS

### Parallel Low-Poly Style Rendering with CUDA

Parallel Computing, C, C++, CUDA

Carnegie Mellon University

Apr. 2018 - May. 2018

- o Implemented the parallel Low-Poly photo rendering with Delaney Triangulation using CUDA.

### PanFS, a distributed file system with high throughput and low latency

Distributed System, Go, Cassandra, Redis

Carnegie Mellon University

Mar. 2018 - Apr. 2018

- o Mimicked Facebook's Haystack. Used Cassandra for directory and needle store, Redis for cache.

### Implementing HTTP, TCP/IP and Bit torrent protocols with Unix Socket

Computer Networks, C, Unix

Carnegie Mellon University

Sept. 2017 - Dec. 2017

- o Built three protocols: HTTP, TCP/IP with congestion control and Bit torrent with DNS load balance.

### Transfer Human Pose Estimation from Kinect to PIXY Camera

Machine Learning, Caffe, Python, Matlab, C++, OpenCV

University of Nottingham

Sept. 2016 - May. 2017

- o Collected and processed the skeleton data from Kinect. Trained a pose estimation CNN with heat-map regression.

### Phone as Multi-player Game Server and Sample Games

Team Leader, Node, Android, JavaScript, Game Development

University of Nottingham

Sept. 2014 - May. 2015

- o Lead a team developing a phone based game server and multi-player games. Designed all UI/UX and game assets.

## SELECTED AWARDS

- o Springer Science and Business Media Prize for Student Dissertation (1 per School) Jun. 2017
- o University Scholarship for the Best Student (Rank 1) Jun. 2017
- o The Award for Excellence in Microsoft Research Asia Internship Program (Top 10%) Sept. 2016
- o Computer Science High Achievers Scholarship Award (10 per School) Sept. 2015