## Jiajun Yao

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**EDUCATION** Carnegie Mellon University, Pittsburgh, PA

School of Computer Science, Master of Computational Data Science

December 2015 GPA 4.07/4.0

Nanjing University, Nanjing, P.R. China

Bachelor of Engineering in Software Engineering

June 2013 GPA 90.2/100

**EXPERIENCE** 

## Qiduo Information Technology Co., Ltd.

July 2013 - July 2014 Beijing, P.R. China

Software Engineer, Earliest member

- A startup providing mobile applications for enterprise

- Responsible for server-side development for all mobile applications

- Developed server-side software using PHP and Python that served >100K users

- Programmed the UI layer of an Android email client called LightMail

## Qiduo Information Technology Co., Ltd.

July 2012 - July 2013 Nanjing, P.R. China

Software Engineer Intern, Earliest member

rvarijing, r.iv

- Created a cloud-based new mail checking and notification system

- Built an enterprise social website

# SELECTED PROJECTS

## YARN Gang Scheduler Team Member (2 developers)

November 2014 - December 2014

Carnegie Mellon University, Pittsburgh, PA

- A new heterogeneity-aware gang scheduler for the Hadoop YARN framework

- Implemented scheduling policies: FIFO, SIF and delayed scheduling

- Minimized the mean completion time of MPI and GPU jobs

## MapReduce Framework

October 2014 - November 2014

*Team Member (2 developers)* 

Carnegie Mellon University, Pittsburgh, PA

- A MapReduce framework that is distributed and fault-tolerant

- Investigated the design and implementation of Hadoop and HDFS

- Architected and developed a distributed file system like HDFS

- Architected and developed a MapReduce facility like Hadoop

#### **Congestion Control with BitTorrent**

October 2014 - November 2014

*Team Member (2 developers)* 

Carnegie Mellon University, Pittsburgh, PA

- A BitTorrent-like file transfer application on top of UDP

- Architected and developed the server-side of the application

- Implemented congestion control mechanisms: slow start, AIMD and fast retransmission

## **HTTPS Server**

September 2014 - October 2014

Individual Developer

Carnegie Mellon University, Pittsburgh, PA

- A select()-based HTTPS1.1 server with CGI support

- Architected and developed the server using C
- Implemented HEAD, GET, POST and CGI
- Implemented a HTTP parser using Flex

## RESEARCH EXPERIENCE

#### **Recommender System for E-commerce Websites**

May 2011 - May 2012

State Key Laboratory for Novel Software Technology

Nanjing University, P.R. China

- Undergraduate innovation project of Nanjing University

- Studied data mining and applied related techniques to the "user cold start" problem

- Gained basic research abilities including paper reading and oral reporting skills

**SKILLS** Languages:

Big Data Technology: Mobile Technology: Java, Python, PHP, C, C++, JavaScript Hadoop, Spark, Hive, Shark, AWS Android Nginx, Twisted, Yii, jQuery

Web Technology: