Zhiyuan Ouyang

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EDUCATION

CARNEGIE MELLON UNIVERSITY

Master of Science
in Computer Engineering
Expected Dec 2016 | Pittsburgh, PA
QPA: 3.71/4.0

KATHOLIEKE UNIVERSITEIT LEUVEN

Bachelor of Science
July 2015 | Leuven, Belgium
Honor Graduation - Magna Cum Laude
QPA: 15.74/20.00 , Ranking:Top 2

BEIJING JIAOTONG UNIVERSITY

Bachelor of Engineering
July 2015 | Beijing, China
Siyuan Honor Program (Acception rate:5.14%)
QPA:3.5/4.0 , Ranking:Top 10

LINKS

LinkedIn:
www.linkedin.com/in/ouyangzhiyuan

RELEVANT COURSES

CMU

Practical Data Science(15688)*
Database Application(15615)*
Artificial Intelligence(15781)*
Distributed System(15640)
Cloud Computing(15619)
Machine Learning(10701)
Computer Vision(16720)
Intro. to Computer System(15513)
Software Construction(15214)
Java Smart Phone Development(18641)

KUL

System Software
Software Development
Data Comm. and Computer Networks
OOP and Databases

SKILLS

LANGUAGES

Proficient (more than 20,000 lines):
Java • C • Matlab • Python

EXPERIENCE

Proficient(more than 2 years)
Linux • Android • SQL

PROJECTS

REMOTE FILE OPERATION PLATFORM(3400 LINES)

C | Distributed System | Linux | Networking
Jan. 2016 - Feb. 2016 | CMU
Implemented a platform that support more than 10 types of file operations for remote files, e.g. read, write, sleek, getdirentries

- Designed serialization and deserialization protocol for message transmission between servers and clients on top of TCP/IP
- Created handler to support concurrent tasks on server using multi-processing and multi-threading and achieve thread safety using mutex

FILE CACHING PROXY (3200 LINES)

JAVA | Distributed System | Networking
Feb. 2016 - March 2016 | CMU
Implemented a file caching proxy on client side that supported all file operations and a server that support file management on distributed system

- Compressed transmitted message by using bit rather than object when serialization and deserialization and used lookup table to restore it to minimize the load of server and latency
- Implemented a high-efficient cache based on LRU replacement policy, achieved consistency by using “last write wins” update propagation principle and supported “check on use” fetch policy to lower down latency at server side
- Programmed for a thread safe concurrent server by using multi-thread and java lock

ELASTIC CLOUD PLATFORM (2800 LINES)

Java | Distributed System | Cloud Design
Mar. 2016 - Apr. 2016 | CMU
Implemented an elastic cloud system that autoscaled the number of virtual machines that balanced on system performance and maximum profit

- Designed a RPS flowmeter to monitor the real time load of the system to control the mechanism of scaling in or scaling out
- Build a load balancer based on “round robin” mechanism to balance the load for group of visual machines
- Design cache system based on LRU mechanism to minimize the latency of the system

MOBILE APP - FOOD HUNTER(4200 LINES)

Android Development
Nov. 2015 - Jan. 2016 | CMU
Implemented an mobile app that supports multiple functionalities related to finding food, such as nearby restaurant searching, booking and chatting

- Designed GUIs for the app that auto-adjusting to screen size on different android devices
- Built server with AWS EC2 and designed database to store user information
- Implemented GPS and camera module for the app

TWITTER ANALYTICS WEB SERVICE(1800 LINES)

JAVA | Cloud Computing | Hadoop
Mar. 2016 - May 2016 | CMU
Implemented an web server with database that support multiple queries through TB level twitter data

- Coded for data preprocessing module to filter clean information from TB level raw twitter data and run on AWS using hadoop MapReduce framework
- Designed an undertow web server that handles http requests and supported 6 kind of queries such as searching, adding and deleting through database
- Designed database with both MySQL and Hbase