

Yuchen Huo

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EDUCATION

CARNEGIE MELLON UNIVERSITY

SCHOOL OF COMPUTER SCIENCE
MASTER OF COMPUTATIONAL DATA SCIENCE (MCDS)
Dec 2017 (Expected)

FUDAN UNIVERSITY

B.ENG IN SOFTWARE ENGINEERING
July 2016
Cum. GPA: 3.85 / 4.0
Cum. GPA Rank: 1 / 81
Major GPA: 3.97 / 4.0

COURSE PROJECTS

Microblog Website
JOS labs
Pipeline Simulator on SimpleScalar
Library Management System (Database Course)
Compression Software (Huffman)
Hadoop Wiki Indexing
Expert System (CLIPS)
Chinese Word Segmentation (CRF)

SKILLS

PROGRAMMING

Proficient:
JAVA • C
Familiar:
C++ • C# • HTML • JavaScript
CSS • \LaTeX • Prolog
Beginner:
Golang • Python
Mobile & Database:
Android • MySQL

CONCURRENCY PLATFORMS

Posix threads • Cilk Plus
Java Concurrency

DISTRIBUTE FRAMEWORKS

Hadoop • Apache Spark

CLOUD COMPUTING

AWS • Azure (Both Learning)

OPERATING SYSTEMS

Linux • Windows

EXPERIENCE

UNIVERSITY COLLEGE DUBLIN | SUMMER RESEARCH INTERN

July 2014 – Aug 2014 | Dublin, Ireland

- Worked in the lab of UCD School of Computer Science.
- Designed the autonomous navigation function unit of a quadcopter.
- Programmed on the Arduino board based on the Multiwii RC flight controller firmware and added the navigation function. Created a Win GUI control panel based on .NET to configure the air route and set parameter of the flight.

FUDAN PARALLEL PROCESSING INSTITUTE | UNDERGRADUATE RESEARCH

Sept 2014 – July 2016 | Fudan

- Advised by Prof. Weihua Zhang, study and research on computer architecture and parallel processing.

PROJECTS

VOCABULARY TREE TRAVERSAL OPTIMIZATION

Sept 2014 – Dec 2015 | Fudan Parallel Processing Institute

- Built an architecture-friendly layer-based parallel pipeline framework of Vocabulary tree traversal.
- Optimized the batched inquiries on a Voctree built upon 1 million images.
- Gained 50X speedup on a sever with 64 cores (AMD Hyper-threading)

ANDROID PUBLIC TRANSPORTATION ALARM | TECH LEADER

Jan 2014 – Mar 2014 | Fudan

- An Android App aimed at reminding users their target bus stops to get off based on the GPS info collected by the smart phone.
- Designed the main framework and programmed the user interactive interface, as the technical leader of a six-member team.
- Won first runner-up in Ishamrock Software Competition at Fudan University.

DISTRIBUTED COURSE SELECTION SYSTEM | TEAM LEADER

Apr 2015 – Jun 2015 | Fudan

- Course project of Software Engineering based on Alibaba's distributed message middleware and a simple low-speed Data Access Component.
- Designed the system to fit the publisher and subscriber distributed model of the middleware and accomplished transaction features among distributed servers.
- Designed the architecture of the system and communication protocols between servers. Programed the request distributor in the front end.
- Led the six-member team and gained highest performance in the class.

HADOOP WIKIPEDIA INDEXING | INDIVIDUAL COURSE PROJECT

Oct 2015 – Nov 2015 | Fudan

- Indexed 51.4G English wiki XML file on a Hadoop cluster with 32 hosts.
- Customized the partition, sort and group functions to enable secondary sort.
- Computed tf-idf and position information through Map Reduce.
- Built a search engine based on the index files with B+ Tree.

AWARDS AND HONORS

2013	national	China National Scholarship (2012-2013)
2014	5%	Wonders Information Scholarship, 1st prize (2013-2014)
2015	national	China National Scholarship (2014-2015)