Zhengyang Zuo

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EDUCATION

Candidate for Master of Science, Information Networking — December 2015
Carnegie Mellon University, Pittsburgh, PA
Cumulative GPA: 3.71/4.33

Bachelor of Engineering, Electronic Engineering — July 2014
Tsinghua University, Beijing, China
Overall GPA: 3.67/4.00

RELEVANT COURSES

2014 Summer & Fall: Introduction to Computer Systems, Search Engines, Fundamentals of Embedded Systems, Packet Switching and Computer Networks

2015 Spring: Distributed Systems, Machine Learning, Mobile and Pervasive Computing Services, Applied Information Assurance

COMPUTER SKILLS

Languages:

- Most experienced with Java
- Some experience with C, C++ and Python
- Dabbled in Javascript and R

Software & Systems: Visual Studio, Matlab, Linux

COURSE PROJECTS

QryEval Search Engine, Search Engines — Fall 2014

- Built a simple search engine based on ClueWeb09 corpus and Lucene indexes
- Implemented Boolean, BM25 and Indri retrieval algorithms
- Implemented pseudo relevance feedback
- Implemented features and test the learning to rank algorithm
- Coded with Java

Gravel OS Kernel, Fundamentals of Embedded Systems — Fall 2014

- Built a simple embedded operating system kernel running on QEMU emulator
- Wrote new syscalls for *read*, *write*, *exit*, *time* and *sleep* functions
- Implemented new SWI handlers, the IRQ handler and timer driver
- Introduced context switching and concurrency control through mutexes

RESEARCH EXPERIENCE

Research Assistant — Spring 2014
Speech and Audio Technology Lab, Tsinghua University, Beijing, China

- Implemented a method to extract semantic structures semi-automatically based on the information queries in the unannotated ATIS-3 corpus
- Implemented unsupervised agglomerative clustering. The clustering process was divided into spatial clustering and temporal clustering
- Introduced injection of prior knowledge and post-processing
- Coded with Python

Research Assistant — Summer 2013
Department of ECE, North Carolina State University, Raleigh, NC

- Built a cognitive radio networks (CRN) simulation framework on PHY/MAC layers
- Used Matlab Simulink to build the simulation framework and process the simulation results