Zhengyang Zuo

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OBJECTIVE

To obtain a summer internship in software engineering & development

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: 87.4/100.0

RELEVANT COURSES

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

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

SKILLS

Languages:

- Most experienced with Java
- Some experience with C, C++ and Python
- Dabbled in Verilog, ARM & x86 Assembly

Software & Systems: MATLAB, LATEX, Linux (Ubuntu), OS X

COURSE PROJECTS QryEval Search Engine, Search Engines

Fall 2014

- Built a simple search engine based on ClueWeb09 dataset and Lucene index
- Implemented Boolean, BM25 and Indri retrieval algorithms
- Added query expansion capabilities using pseudo relevance feedback
- Introduced features and tested the learning to rank (LeToR) algorithm
- Coded with Java

Gravel OS Kernel, Fundamentals of Embedded Systems

Fall 2014

- Built a simple embedded operating system kernel
- Wrote new syscalls for read, write, exit, time and sleep functions
- Implemented new SWI handler, IRQ handler and timer driver
- Introduced task scheduling and concurrency control using mutexes

RESEARCH EXPERIENCE Research Assistant

Spring 2014

Summer 2013

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
- Coded with Python

Research Assistant

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