Caicai CHEN

280 Kings Hwy, Brooklyn, NY 11204 · 347-479-5963 · caicai.chen@nyu.edu

EDUCATION

New York University, Tandon School of Engineering, New York, NY

Master of Science, Computer Science, GPA: 4.0

Wuhan University, School of Mathematics and Statistics, Wuhan, China

Bachelor of Science, Applied Mathematics, GPA: 3.2

Wuhan University, School of Economic and Management, Wuhan, China

Jun 2011

Bachelor of Arts, Finance, GPA: 3.2

TECHNICAL SKILLS

Programming: JAVA, C, Python, Shell, Assembly

WORK EXPERIENCE

Huawei Technologies, Software Engineer, Shenzhen, China

Aug 2011 - Jun 2013

- Redesign of CPU-hotplug feature on a customized ARM processor
- Development of a new kernel feature of an efficient memory reserving policy
- Development of a new kernel feature "Tinysleep" on x86 architecture
- Development of a code management and compilation framework based on Yocto
- Code review, administration and maintenance for the kernel development team

PROJECTS

Mini Camelot Game, New York University

May 2015

- Implemented a highly efficient board game engine with sophisticated moving strategies
- Designed TKInter based GUI
- Added caching layer to speed up the robot player thinking time up to 1000x

Focused Strategy Web Crawler, New York University

Sep 2015

- Used focused strategy to implement a high speed web crawler in Python
- Implemented priority based crawling using TF relevance scoring
- Used multithreading to speed up the crawl up to 20x

Inverted Index Generator, New York University

Oct 2015

- Generated index of 4 million documents of July 2015 CommonCrawler dataset in 40 minutes.
- Used double relative offset and Simple-9 Compression to compress index by 60%.
- Implemented an I/O efficient N-Way Merge Sort to produce final inverted index.

Neural Network Application on Hand-Writing Recognition, New York University

Dec 2015

- Used Back Propagation to train MNIST data, and achieved 97.74% accuracy on test set.
- Explored relation of Mini-batch size with accuracy, learning rate, learning speed and training set size.

HONORS and AWARDS

• Academic Achievement Award (top 5%), New York University, New York	2015
• Gold Team, Huawei Technologies, Shenzhen	2012
• Renmin Scholarship, Wuhan University, Wuhan	2008, 2010