

Longqi (Rocky) Cai

Software Engineer interested in Machine Learning
515 South Aiken Avenue, Pittsburgh, PA

August 21, 2016

longqicai@gmail.com

<http://misaka-10032.github.io>

Education

- **Carnegie Mellon University** Pittsburgh, PA
M.Sc. in Information Technology Strategy Sep. 2015 - Dec. 2016
- **Fudan University** Shanghai, China
B.Sc. in Computer Science and Technology Sep. 2011 - Jul. 2015

Experience

- **Glow, Inc** San Francisco / Shanghai
Software Engineer Jul. 2014 - Jul. 2015
 - Contributed 18k lines to Glow app, 8k lines to Nurture app.
 - Mainly worked on Android, sometimes on server.
 - Customized fancy UI widgets and animation.
 - Set up internal Maven center with Archiva and Gradle.
 - Integrated Google Now API, including both server and client side OAuth2 flow.

Github Repositories

- **Caffe Exts** Integrated Message Passing Interface (MPI) for distributed training.
Implemented fast Hough transform layer for powerline detection task.
- **Halstm** Implemented Long-Short Term Memory (LSTM) with Halide.
Improved CPU performance by 2x speedup.
- **Alg** Implemented commonly used algorithms and data structures.
Including hash map, min/max/med heap, avl/red-black tree, order statistics, graph traversal, etc.
- **ML/BigML/PGM** Implemented machine learning algorithms.
Including SVM, SVR, logistic regression, decision tree, HMM, LDA, sampling methods, etc.
Some of them used Hadoop, Spark, or Parameter Server for big data.

Language

- **Python** lover; experience with machine learning, algorithm, data processing/analysis/visualization.
- **Java** experience with Android and Big Data; **C++** experience with Caffe extensions; **Shell** experience with batch processing; **Makefile/CMake/Gradle** experience with project setup; **HTML/Javascript/CSS** experience with short demos; **Vagrant/Docker** experience with environment setup; **C/Assembly** experience with 15213; **CUDA** experience with 15418; **Latex** and **Markdown** experience with documents.