

Longqi (Rocky) Cai

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

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EXPERIENCE

- **Google, Inc** Mountain View, CA
Software Engineer Mar. 2017 - Present
 - Implemented the pipeline for on-device face grouping in Google Photos.
 - Built the image-search index for labeled products in Google Lens.
- **Carnegie Mellon University** Pittsburgh, PA
Teaching Assistant Sep. - Dec. 2016
 - Assisted Prof. William W. Cohen in the class *Machine Learning with Large Datasets*.
 - Improved the assignment *Approximate PageRank* by visualization on a cleaner dataset.
 - Designed the assignment *Phrase Finding on Spark*, helping students visualize the phrase cloud.
- **Glow, Inc** Shanghai, China
Software Engineer Intern Jul. 2014 - Jul. 2015
 - Glow is a startup that cares about women's health, founded by Max Levchin.
 - Customized the UI widgets and the animations for better user experience.
 - Set up the internal Maven center, and extracted the common libraries.
 - Implemented the OAuth2 flow for the Google Now Integration.

EDUCATION

- **Carnegie Mellon University** Pittsburgh, PA
M.Sc. in Information Technology Strategy (3.87/4.00) Sep. 2015 - Dec. 2016
- **Fudan University** Shanghai, China
B.Sc. in Computer Science and Technology (3.64/4.00) Sep. 2011 - Jul. 2015

PROJECTS

- **Partical Systems** Carnegie Mellon University
Class project for Compute Graphics Dec. 2016
 - Implemented the abstraction of a particle system in Javascript.
 - Built two simulation examples based on this abstraction: fireworks and cloth.
- **Powerline Detection on Aerial Images** Carnegie Mellon University
Independent Study supervised by Prof. Kayvon Fatahalian Jun. - Aug. 2016
 - Adapted Fully Convolutional Network to the task of line detection.
 - Implemented a fast Hough Transform Layer, improving convergence rate by 10 times.
 - Built a web visualization tool to diagnose and evaluate results.
- **Halstm** Carnegie Mellon University
Class project for Parallel Computer and Architecture Programming Apr. - May. 2016
 - Implemented Long-Short Term Memory (LSTM) with Halide.
 - Exploited multi-thread execution and SIMD.
 - Improved the CPU performance by 2x speedup, compared with Caffe.

SKILLS

- Language: C++, Java, Python.
- Tools: Bash, Git, Mercurial, Bazel, Makefile, Markdown, Latex.