# Brian Z. Shi

#### **EXPERIENCE**

#### **Uber Technologies, Inc.**

San Francisco, CA | May 2016 - Present

Software Engineering Intern

- Backend engineer for China Growth, focusing on increasing rider acquisition in China.
- Developing an open-source state machine web framework and a highly-scalable and extensible signup/password recovery service.
- Code written in Go and will be deployed to millions of daily Uber riders in August.

# University of Pennsylvania Medical School, Dept. of Radiology

Philadelphia, PA | December 2015 - May 2016

Image Analysis Programmer

- Developed a machine learning pipeline which quickly and accurately detects risk for breast cancer by analyzing mammograms.
- Created a texture analysis library with features such as lattice grid imposition and wavelet decomposition.
- Worked under Professor Despina Kontos in Penn's Center for Biomedical Image Computing and Analytics (CBICA).

## University of Pennsylvania

Philadelphia, PA | May 2014 - December 2015

Teaching Assistant, CIS 121

- Taught weekly recitations, implemented autograders, held office hours, graded assignments and exams, and lead review sessions.
- Created writeups, interfaces, solutions, and test cases for coding projects.
- Improved the vast autograding infrastructure written in Java and Python, and added new tools for class statistics.

SumAll

Manhattan, NY | May 2015 - August 2015

Software Engineering Intern

- Backend engineer for SumAll, a startup that brings analytics, reporting, and business intelligence to social media platforms.
- Wrote RESTful, distributed, and sharded backend microservices that synced together the company's streams of user data.
- Developed in Java with DropWizard and Python with Flask, and used technologies such as Mongo, Dynamo, Jenkins, and Docker.

Freelance November 2013 - Present

Contract Software Developer

- Worked on contract for several projects in spare time, here are some highlights:
  - Developed and maintained penstesting.com, a web app used for creating and administering exams to medical school students.
  - Developed Node.js+Express backend for a fitness startup which connects athletes/exercisers to coaches/instructors.
  - Developed data visualization and analytics application for a startup which uses machine perception to improve posture.

### **EDUCATION**

# University of Pennsylvania

Philadelphia, PA | August 2013 - May 2016

Computer Science

Coursework:

Internet & Web Systems CIS 555 Special Topics in Algo. CIS 677 Analysis of Algorithms CIS 502 Machine Translation CIS 526

Distributed Software CIS 505 Database & Info. Systems CIS 550 Artificial Intelligence CIS 391 Scalable Cloud Computing CIS 212

#### **SKILLS**

Languages: Advanced: Go, Java, JavaScript, Python

Proficient: Shell, C, SQL, PHP, HTML/CSS

Beginner: Scala, Haskell, OCaml

**Technologies:** Apache (Server, Maven, Hadoop, Spark, Tomcat, Cassandra, Thrift), AWS (EC2, S3, Dynamo), Flask, DropWizard,

Node.js, Express, Backbone, Jenkins, Docker, Git, Subversion, Vim, IntelliJ, Unix, Linux