

# Brian Z. Shi

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## EXPERIENCE

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### Flatiron Health

New York, NY | October 2016 - Present

#### Software Engineer

- Engineer for Flatiron's Trials division, focused on running multi-million dollar clinical trials for cutting-edge cancer treatments.
- Building massive data pipelines and full-stack workflow tools to effectively screen patients and run trials.
- Highly customer-facing role that includes on-site go-lives around the country and weekly client calls and pitches.

### Uber

San Francisco, CA | May 2016 - August 2016

#### Software Engineering Intern

- Backend engineer for the Growth division, focused on increasing global rider outreach and acquisition.
- Developed an open-source state machine web framework and a highly-scalable and extensible signup/password recovery service.
- Code written in Go and 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.

### Freelance

November 2013 - Present

#### Product Development Consultant

- Worked on several solo projects, where I consulted with nontechnical clients to develop scalable, well-designed software solutions.
  - Developed pcnsteesting.com, a web app used by Pitt professors to create and administer exams to medical school students.
  - Developed entire Node.js+Express backend API and dispatch system for fitness startup which connects exercisers to instructors.
  - Developed entire data visualization and analytics application for ML startup which uses machine perception to improve posture.

## EDUCATION

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### University of Pennsylvania

Philadelphia, PA | August 2013 - May 2016

#### Computer Science

##### Coursework:

<i>Internet &amp; Web Systems</i> CIS 555	<i>Special Topics in Algo.</i> CIS 677	<i>Analysis of Algorithms</i> CIS 502	<i>Machine Translation</i> CIS 526
<i>Distributed Software</i> CIS 505	<i>Database &amp; Info. Systems</i> CIS 550	<i>Artificial Intelligence</i> CIS 391	<i>Scalable Cloud Computing</i> CIS 212

## SKILLS

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