Brian Z. Shi

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EXPERIENCE

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 pcnstesting.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

University of Pennsylvania (on leave)   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, Node.js, Express, Backbone, Jenkins, Docker, Git, Subversion, Vim, Unix, Linux