# PETER DOWNS

http://peterdowns.com downs@mit.edu

#### **EDUCATION**

### Massachusetts Institute of Technology

June 2018 (anticipated)

B.S. in Computer Science & Engineering (6-3)

Cumulative GPA: 4.9/5.0

#### WORK EXPERIENCE

Summer 2016 **B12** 

Software Engineering Intern

New York City, NY

- · Helped implement a full design rebrand of the company website.
- · Improved the usability and capabilities of an internal-only tool for designing websites.
- · Implemented an asset-fetching pipeline giving web designers access to a customer's existing content (such as text, images, and video) while designing.
- · Exploratory research on using machine learning techniques to build more effective web design tools.

Beme, Inc. Summer 2015 Software Engineer New York City, NY

· Designed and implemented the authentication scheme used by the Beme mobile app. Contributed to and

- largely re-wrote an open source library for this purpose: https://github.com/peterldowns/vangoh
- · Implemented product features, such as video and user recommendation algorithms.
- · Refactored existing web server code (Golang) to make it much easier to write tests against API endpoints.
- · Investigated and compared many different reverse geocoding services.

Coinbase, Inc. January 2015

Software Engineering Intern

San Francisco, CA

- · Wrote and released an open source Python client library for the new Coinbase API: https://github.com/coinbase/coinbase-python
- · Improved web site performance by profiling existing Ruby code and modifying caching behavior.

## Locu, Inc. / GoDaddy Software Engineer

September 2012 – June 2014

San Francisco. CA

- · Worked as a full-stack web developer. Developed, maintained, and improved the site's backend (Python/Django) and frontend (Javascript/JQuery/Angular).
- · Designed and implemented a novel Javascript content layout algorithm (provisional patent filed).
- · Designed, implemented, and open-sourced a complete OAuth2 server implementation for Django.
- · After company acquisition by GoDaddy, helped lead team working on user authentication and payment system integration.
- · Advocated for and implemented better code review and testing protocols.

## The High Energy Physics Lab at The University of Pennsylvania, Software Engineering Intern

Summers 2010-2011 Philadelphia, PA

- · Wrote low-level software for medium-scale data collection and processing.
- · Created internal tools that greatly increased the speed of hardware testing.