

# PETER DOWNS

<http://peterdowns.com>

[downs@mit.edu](mailto:downs@mit.edu)

## EDUCATION

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**Massachusetts Institute of Technology**  
B.S. in Computer Science & Engineering (6-3)  
Minor in Linguistics  
Cumulative GPA: 4.9/5.0

*June 2018 (anticipated)*

## WORK EXPERIENCE

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### **B12**

*Software Engineering Intern*

Summer 2016

*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.**

*Software Engineer*

Summer 2015

*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.**

*Software Engineering Intern*

January 2015

*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.