

Katie Siegel

ksiegel@mit.edu | 408.691.8871 | ktsiegel.com | github.com/kathrynsiegel

EDUCATION

Massachusetts Institute of Technology (MIT)

2012-present

M.Eng. Computer Science w/ conc. in computer systems, expected June 2016

S.B. Computer Science and Engineering, expected June 2016

GPA: 5.0/5.0

- Eta Kappa Nu (HKN) honors society member and exec. board member.
-

SKILLS

Programming Languages C, C++, Go, HTML/CSS, Java, Javascript, Objective C, Python, Ruby, Swift

Frameworks and Tools Flask, Hadoop, iOS, L^AT_EX, node.js, Pebble, SQL, Ruby on Rails

Selected coursework Advanced Data Structures, Algorithms, Computer Systems, Database Systems, Machine Learning, Performance Engineering of Software Systems, Statistics, Web Software Studio, Distributed Systems

EXPERIENCE

MemSQL | Intern | Query Execution Infrastructure team

San Francisco | June-Aug 2015

- Optimized hash joins by implementing and integrating a grace hash table.
- Conducted performance analysis of query execution optimization strategies.
- Fixed issues involving column store query execution.

Dropbox | Intern | Mailbox iOS team

San Francisco | June-Aug 2014

- Implemented Bluetooth keyboard integration in the Mailbox iOS app.
- Designed and prototyped an analytics dashboard displaying Mailbox iOS usage.
- Won Hack Week team award for a feature adding write-only shared folders for content collection.

Square | Intern | Information Security team

San Francisco | June-Aug 2013

- Developed an internal Rails site that reads & displays security data from Hadoop.
 - Added elastic search and other features to Rails internationalization software.
-

RESEARCH AND SELECTED PROJECTS

H-Store Implementation of replication strategies in H-Store, a research effort in the MIT Databases Lab.

Zauberflöte Distributed peer-to-peer content delivery system utilizing WebRTC and a BitTorrent-like tracker.

SkipChat A secure, distributed, bluetooth peer-to-peer messaging service that hops network discontinuities.

- Top 10 at MHacks V

nunchuck.js Open-source library for real-time hardware data synchronization between mobile and desktop browsers.

- 2nd place at YCHacks

EDUvote Lecture planning software that facilitates real-time feedback to in-class questions via text messaging.

- First place in 6.170, MIT's Software Studio class

TEACHING

6.170: Software Studio | Teaching Assistant

fall 2014, 2015

- Software engineering course covering design & implementation of medium-scale software systems using node.js.
- Taught recitations, coached teams through design and development of final projects, and graded assignments.

6.042: Math for Computer Science | Lab Assistant

spring 2013

- Discrete mathematics course for computer science majors.
 - Led problem solving sessions for a section of students and graded coursework.
-

LEADERSHIP

HackMIT

2013-2014

Directed MIT's largest hackathon, raising \$300k+ in sponsorship and organizing logistics for 1000+ attendees.