

# Peter E. Xu

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## Education

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### University of California, Berkeley

B.A. Computer Science, expected May 2018

GPA: 3.53

Current Coursework: Computing with Data

Relevant Coursework: Networking, Computer Security, Operating Systems, Databases, Artificial Intelligence, Foundations of Data Science, Devices and Systems, Computer Architecture, Efficient Algorithms & Intractable Problems, Discrete Math & Probability Theory, Linear Algebra & DiffEq, Multivariable Calculus

## Skills

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Proficient in Java, Go, Python, Git, Unix

Experience with C++, C, Swift, iOS, AngularJS, Node.js, MongoDB, HTML, CSS

Conversant in Mandarin.

## Industry Work Experience

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### Amazon.com, Seattle, WA

*Software Development Engineer Intern, Marketplace*

May 2017 - August 2017

- Designed and implemented an analytics console from the ground up for a new workflow orchestration engine.
- Leveraged AWS Kinesis Firehose, Elasticsearch, Spring, Java, and AngularJS to build an end-to-end monitoring platform to track workflow health and simplify fault isolation.

### Workday, Pleasanton, CA

*Associate Software Engineer Intern, Business Intelligence*

May 2016 - August 2016

- Developed a debugging tool for Workday's Composite Reporting platform for financial reporting.
- Designed and implemented a graph minimizing algorithm to locate the source of error.

## Academic Work Experience

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### UC Berkeley Computer Science Department, Berkeley, CA

CS 61A, Structure and Interpretation of Programs

*Undergraduate Student Instructor*

January 2016 - Present

- Lead weekly discussion and lab sections.
- Hold weekly office hours to assist students.

### Building-Energy-Transportation Systems Project, Berkeley, CA

*Research Assistant*

August 2016 - October 2017

- Develop IoT device drivers for the BOSSWAVE 2 pub-sub data plane.
- Implementing a parallelized sensor data migration application to aid in upgrading database platforms.
- Developing a distributed thermostat-scheduler system.

## Projects

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### QuickSend - C++

- A lightweight terminal-based program to send emails and attachments quickly.
- Git-inspired features such as file staging, message logging, and account switching.

### HotBox-X - Java, Node.js, AngularJS, MongoDB

- *Flappy Bird*-like game developed for the Model Predictive Control Lab at Berkeley. Game modes and parameters such as obstacle distribution, gravity, and reward value are configurable by the researcher.
- Data such as player, obstacle, and reward positions are recorded for research purposes.

### Yannotator - Node.js, AngularJS, MongoDB

- YouTube video annotator web application that supports keyboard and speech-to-text annotating.
- Annotations appear at specified start times and persist for a user-set period of time as video plays.
- Annotations are shareable through room codes so that others may join, read, and contribute in real-time.