Peter E. Xu

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Address: 1780 Spruce St. #5, Berkeley, CA 94709

Education

University of California, Berkeley
B.A. Computer Science, expected May 2018
GPA: 3.53
Relevant Coursework: Computer Security, Operating Systems, Databases, Artificial Intelligence, Foundations of Data Science, Devices and Systems, Computer Architecture, Efficient Algorithms & Intractable Problems, Data Structures, Discrete Math & Probability Theory, Structure & Interpretation of Programs, Linear Algebra & DiffEq, Multivariable Calculus

Skills

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

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, Tools Division - 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

Software Defined Buildings Lab, Berkeley, CA
Research Assistant August 2016 - Present

- 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.

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.

Projects

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.