2520 College Avenue, Apt. 402, Berkeley, CA, 94704

# Peter Qiu

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#### **EDUCATION**

B.S. – Electrical Engineering & Computer Science

University of California, Berkeley Regents' and Chancellor's Scholar GPA: 3.83 August 2015 - May 2019

# **EXPERIENCE**

### **Precision Engineering Intern**

#### **Jabil Circuits**

May 2016 – August 2016

- Improved experiment accuracy and saved over \$10,000 by building a cleanroom sensor suite.
- Reduced time taken to climate control laboratories by implementing a real-time data dashboard that included SMS alerts and e-mail based data collection (Twilio, NodeMailer).
- Implemented all aspects of the dashboard, including front-end (React, d3), back-end (Express, Mongoose), sensor interface (Arduino), and deployment (Heroku).

## Web Developer

## **UC** Berkeley Innovative Design

September 2016 – Present

- Developing websites for clients, including both on and off campus organizations (React, Gatsby, Sass).
- Capturing client branding and adhering to best practices, such as BEM and AirBnB's ES6 style guides, in a team of designers and full-stack developers.

# **Projects Developer**

## The Daily Californian

September 2016 – Present

- Extracting datasets from various mediums through web scraping and OCR (BeautifulSoup, Tesseract).
- Performing data filtering, geocoding, analysis, and visualization in the spirit of data-driven journalism for tens of thousands of readers (Python, R, d3).

#### Web Officer

#### **UC Berkeley IEEE**

January 2016 – Present

- Maintaining IEEE website by migrating Rails versions and implementing mass photo upload.
- Spearheading development of a new website and a comprehensive test suite (React, Angular).
- Designing features for companies listed on the UC Berkeley Start-Up Fair website.

#### Field Control Staff Member

# Pioneers in Engineering

January 2016 – September 2016

- Contributed to Dawn, a UI for the robotics competition run annually by PiE (Redux, Electron).
- Linked and synced central game server to buttons and motors on the field (Python, Google LCM).
- Integrated in-house motor controllers with game timers (Arduino).

## **PROJECTS & ACHIEVEMENTS**

- **Text Editor:** A fully functional text editor built using Java, adhering to TDD with JUnit. Implemented and utilized multiple data structures to work within time and space constraints (Class Project, Spring 2016).
- **Bear Maps:** Parsed OSM data, applied A\* pathfinding, added support for HTTP endpoints, and used quadtrees to create a navigable map of Berkeley in Java (Class Project, Spring 2016).
- **Jarvis:** A "personal assistant" built with Python that displays weather, performs voice-activated Google searches, and pulls stock info (CS98 Practical Programming, Fall 2015).
- Cheetah Hunt: Agent-based models of predator-prey interactions applied to wildlife conservation efforts, built with NetLogo and Java (University of Florida SSTP, 2014).
- **AIME:** Qualified for the American Invitational Mathematics Examination four times (2011 2015).
- picoCTF: Placed in the top 100 of over 3500 teams in a capture-the-flag cybersecurity competition (2014).

## **SKILLS**

Languages: Javascript, Python, Java, HTML5, CSS3, SQL, R, NetLogo, C, MIPS assembly. **Libraries, Services:** React, d3, OpenCV3, jQuery, Bootstrap, BeautifulSoup, Heroku, mLab. Tools, Frameworks: GitHub, Bitbucket, Redux, Mongoose, Express, Electron, Gatsby, Sass.