Zhenruo (Flora) Xue

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EDUCATION

University of California, Berkeley   **Aug 2015 - May 2018**
Bachelor of Arts, Computer Science

- Major GPA: 3.833; Upsilon Pi Epsilon (Computer Science Honor Society) Member

TECHNICAL SKILLS

Languages: Java, Python, SQL, Scheme, Swift, C, PHP
Software: Git, Numpy, Django, IntelliJ, Android Studio, XCode
Hardware: Arduino, TI Launchpad

PROFESSIONAL EXPERIENCE

Berkeley Institute of Data Science (Text Thresher Project), Berkeley, CA   **Feb 2016 – Present**
Research Assistant

- Built a crowdsourcing platform for generating machine learning training data on annotating newspaper articles
- Rewrote the **Django** RESTful backend, including data models and data parsers
- Met weekly with three front end developers to build API endpoints
- Rewrote a clear documentation, articulating the structure of the project and the purpose of each file

Berkeleytime.com, Office of CTO, Associated Students of University of California   **Sep 2016 – Present**
Backend Developer

- Developed a course scheduler feature for **29,000+** users on Berkeley's most popular course catalog website
- Built the Model, View and Controller for the scheduler with **Django**
- Applied Constraint Satisfaction Problem **algorithm** to solve the scheduling problem
- Acquired the ability to get started with a codebase of 221793 lines in several hours and work with ill-documented APIs

Bookselves, Berkeley, CA   **Feb 2016 – June 2016**
Software Developer

- Attended weekly meetings to gear a startup with 6 other team members and design the product
- Rewrote the **Django** backend from scratch with tech lead due to the close down of Parse
- Fixed bugs for **iOS** App v1.2 with 1100+ users

PROJECTS & COMPETITIONS

"Invisible Drawer Lock", Robotics Design Competition   **Sep 2016 – Nov 2016**
Group Leader & Software Developer

- Designed and built an alerting device to secure drawers, applicable to all student dorms
- Learned hardware: integrated ultrasonic sensor on an **Arduino** microchip with Wi-Fi and Bluetooth module
- Built software: developed a **Django** backend with Twilio's **SMS** service, and an **Android** app for remote controlling
- Led a group of three in setting up a timeline and scheduling work sessions
- Pitched and demoed in a 100 people lecture hall
- Received 2nd Place among 14 in Dorm Ex Machina (Robotics at Berkeley's dorm-themed robotics design competition)

Ultimate Trade, UC Berkeley Hackathon Cal Hacks 3.0   **Nov 2016**
Backend Developer

- Built a second-hand furniture trading website for Berkeley students only
- Developed the **Django** RESTful backend, with Microsoft **Computer Vision** API
- Brainstormed for the idea, designed features, developed and demoed in 36 hours with 3 other developers

Flying Search, Google CodeU 2016   **Mar 2016 – Aug 2016**
Developer

- Built a Wikipedia search engine in my freshman year as the final project for CodeU program at Google
- Developed a command line interface, and algorithms for web crawling, indexing pages, retrieving results
- Learned to use remote Redis database server and researched on using TF-IDF to improve search results
- Teamed up with two other students to design the features and address technical difficulties