

# Lucy Qu

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## EDUCATION

**Brown University**, B.S. Computer Science GPA: 3.8/4.0

*Providence, RI | Expected Graduation: May 2022*

- Relevant Courses: Software Engineering, Computer Systems, User Interfaces and User Experience, Algorithms and Data Structures, Object Oriented Programming, Discrete Structures and Probability, Linear Algebra, Honors Statistics
- Activities: Bonner Community Fellowship, Brown Daily Herald Layout Editor

## SKILLS

- Technical: Java (proficient), Python (proficient), C (proficient), Javascript (React), HTML, CSS
- Creative: Adobe Illustrator, Photoshop, Premiere Pro, Final Cut Pro, Lightroom, iMovie
- Fluent in Mandarin and Wenzhounese; proficient in Spanish

## TECHNICAL EXPERIENCE

**Google**, *STEP Intern*

*Pittsburgh, PA | May 2020*

**GivePulse**, *Software Engineering Intern*

*Remote | May 2019 – August 2019*

- Develop support for QR code generator and QR code scanner in React Native App
- Add additional pages and features to application, update user interface for iOS app, and contribute to existing code base through Git workflow
- Test application, document 40+ bugs and improvements on GitHub, and close 20+ tickets

## CS RELATED PROJECTS

**DishUp**, CSCI 0320 Introduction to Computer Engineering - Java, SQL, React

*April - May 2020*

- In team of 4, built food review web application (Yelp but for dishes) with React frontend integrated with Java backend deployed to Heroku, including user management/authentication, Postgres database, KDTree search algorithm and autocorrect
- Wrote Java classes for all essential components (reviews, dishes, tags, dietary restrictions, etc.) and related queries (favorites, price average, Bayesian mean rating calculation, and much more - largest class of queries), sorting and filtering, about page, high-fidelity design and mockups for the website, testing and checkstyle

**Maps**, CSCI 0320 Introduction to Computer Engineering - Java, SQL

*March - April 2020*

- Implemented Dijkstra's algorithm that concurrently builds the graph while finding the shortest path. Implemented KDTree and used k-nearest algorithm to find neighbors of inputted coordinates. Used SQL statements to extract data from large database files and made use of caching to speed up run time.
- Focused on design of project, such as using proxy classes and interfaces, to make code generic, modular, and extensible, and wrote extensive system and JUnit tests

**Shell**, CSCI 0330 Introduction to Computer Systems - C

*November 2019*

- Built a shell terminal capable of handling multiple child processes and responding to UNIX commands
- Handled file redirection, process reaping, and signaling

## LEADERSHIP EXPERIENCE

**Brown University**, *Undergraduate TA for CSCI 0160: Data Structures and Algorithms*

*Providence, RI | January 2020 – present*

- Hold weekly office hours that include debugging code and explaining conceptual questions
- Lead two sections weekly consisting of ~10 students each to review material
- Grade homeworks, projects, and answer Piazza questions
- Hold mentorship meetings with students to provide support for Brown CS

**Bonner Community Fellowship**

*August 2018 – present*

- Most selective and prestigious community service fellowship offered by the Howard R. Swearer Center
- Commit to 6-8 hours of service weekly with local community organization (HousingWorks)

**HousingWorks RI at Roger Williams University**, *Data Researcher*

*Providence, RI | September 2019 – present*

- Assist development of annual Housing Fact Book by parsing through census data and making calculations using Excel
- Research affordable housing in Rhode Island and its intersectionality with both micro and macro systems