Bixin Zhang

(857) 302-9758 | bz239@cornell.edu | LinkedIn: bixinZhang
personal site | Github: zbcszr

Objective

Actively seeking opportunity in Software Engineer Internship to learn, grow and make an impact on the world.

Education

Cornell University, B.S. in Computer Science   Aug 2019 - May 2023
GPA: 3.63/4.0   Ithaca, NY
Selected Coursework: Object-Oriented Programming and Data Structures, Design and Programming for the Web, Functional Programming, C++ Programming, Probability models and inference, Analysis of Algorithms | **In Progress:** Computer Vision, Computer System Organization, Computer Network

Experience

Cornell Course Management System   Aug 2020 – Present
- Implement APIs interacting with JPA/MySQL using Java, connect endpoints to front-end using TypeScript, and conduct integration tests and unit tests to ensure proper functionality.
- Increase overall test coverage by 5% by refactoring code using dependency injection and adding persistence test units running on H2 database.The system is used by over 8,000 students from 40+ courses.

Projects

Mahjong   Oct - Dec 2020
- Utilizing principles of test driven development, modularization, and encapsulation, implemented and tested all playing and scoring rules of Mahjong in OCaml from the ground up.
- Implemented victory validation algorithms and user-interaction parts of logic in the system with a teammate.
- Developed algorithms to provide player with possibilities of winning combinations, and dangerous level of playing each tile.

Eathaca   Aug - Sept 2020
- To promote sustainability through food waste minimization, researched and implemented the following features: grocery expiration management, variety user types, recipe search based on existing groceries, public posts using Java in Android Studio.
- Deploy the app on Firebase to support user authentication and data synchronization storage in real-time.

Application portal @DreamCorps   June - Aug 2020
- Developed intuitive and mobile-friendly front-end interface for admin-side and applicant-side application using JavaScript, React.js, Redux, and Material-UI.
- Used server-side rendering and lazy loading to optimize performance on application view; Created reusable components to speed up development process.
- Designed, implemented, and refactored a PostgreSQL Database to efficiently support application storing, removing, searching, status changing, and grouping.

Leadership & Volunteer Experience

Volunteer at Girls Who Code, Women Computing at Cornell   November 2019 - February 2020
- Collaborated with a team of 7 to deliver workshops aiming to empower young females to explore the field of Computer Science.
- Mentored local students with projects in Python including brain-storming project ideas, defining project scope, and identifying related technical topics

Co-Founder, ArtForChange Organization   September 2018 - May 2020
- To tackle the challenge of lack of in-person experience because of Covid-19, built a web application to facilitate artwork auctions with HTML, CSS, JavaScript, and PHP by showcasing artworks and their statuses.
- Led a team of 3 to collect art donations from students, faculties and local artists.
- Consolidated over 50 meetings and art workshops through close communication with supervisors and members.

Skills

- **Programming and Styling Languages:** Java, Python, TypeScript, JavaScript, SQL, PHP, HTML, CSS
- **Technologies and Frameworks:** React.js, Firebase, Android Studio, Git, Docker, Linux