**BRIAN QI**

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**EDUCATION**

**University of California, Berkeley** Double Major: Computer Science and Data Science, B.A. Expected May 2021

**GPA: 3.95/4.00**

Relevant Coursework: Data Structures, Algorithms, Software Engineering, Data Science and Machine Learning, Programming Languages, Artificial Intelligence, Discrete Math and Probability, Machine Structures, Linear Algebra

**WORK EXPERIENCE**

**Roblox – Software Engineering Intern** (San Mateo, CA) 06/2020 – 08/2020

* Worked on the Growth Core team to drive customer acquisition, retention and revenue growth at Roblox
* Implemented a new user flow to set, update and verify emails associated to accounts in Roblox, allowing compromised users and Customer Service to quickly revert user email changes (C#)
* Designed and implemented SEO projects to increase organic search traffic to Roblox and its game pages (C#, SQL)
* Refactored Controller and Manager classes in order to enforce separation of concerns within MVC architecture (C#)

**LinkedIn – Software Engineering Intern** (Sunnyvale, CA) 01/2020 – 04/2020

* Worked on the Commerce and Enterprise Platform team to develop a new quoting, ordering and billing platform used by over 2000 LinkedIn sales representatives to make business to business transactions
* Wrote the backend of an activity tracking interface that allows sales representatives to have a clearer insight into customer actions and the state of their orders in order to complete their sales more effectively (Java, Python)
* Created an order state tracking feature within the Commerce Platform that allows sales representatives to know when and why an order is on hold and the steps that can be taken to unblock the various hold states (Java, Python)
* Developed a reconciliation task that runs nightly to verify the correctness of the different systems handling contract and payment data regarding data that has been created or modified within a configurable time duration (Java, SQL)

**HelpWear – Software Engineering Intern** (Toronto, Ontario)06/2019 – 08/2019

* Collaborated with product management, design and engineering teams to develop and test critical software for a wearable heart monitoring system using agile practices and test-driven development
* Developed a software that generates patient reports from raw ECG data for cardiologists to analyze (Python, SQL)
* Optimized code for ECG segmentation, increasing processing speed by 25 times and segmentation accuracy by 30%

**UC Berkeley – Data Science Research Assistant** (Berkeley, CA) 04/2020 – Present

* Working under Professor Abhishek Nagaraj to use data driven methods to investigate how access to academic resources affect productivity and future employability for doctoral candidates in Economics within the United States

**Computer Science** **Mentors – Junior Mentor** (Berkeley, CA) 01/2019 – 12/2019

* Taught concepts from CS 70 (Discrete Math and Prob. Theory) to 2 auxiliary sections of 5 students every week
* Provided extra services such as review and midterm prep sessions to 700+ students

**PROJECTS**

**Gitlet –** Java

* Built a slim version-control system that mimics features from Git (i.e. commit, branch, merge, log, status)
* Used Java’s serializable interface and cryptographic hash functions to design internal file structures

**Bear Maps –** Java, Python

* Utilized real-world mapping data to implement the back end that powers the API of a Java web mapping application
* Performed routing and graph traversals using quad trees and the A\* algorithm to find suggested navigation
* Implemented core functionalities include scrolling, zooming, autocomplete, and route finding

**Scheme Interpreter –** Python

* Programmed an interpreter for a subset of the Scheme language using Python
* Interpreter supports call expressions and special forms (i.e. define, define-macro, cond, let, begin, lambda, mu)

**TOOLS AND TECHNOLOGIES**

**Proficient:** Java, LaTeX, Python (+ NumPy, SciPy, scikit-learn, Jupyter, pandas, re, ray distributed computing), SQL

**Familiar:** ASP.NET, C, C#, CSS, Git, HTML, IntelliJ, JavaScript (+ jQuery), Linux, .NET, RISC-V, Scheme, Unix, Visual Studio