BRIAN LAI

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EDUCATION

San Francisco State University (SFSU)	**Relevant Coursework**
August 2016 – May 2020	Data Structures, Discrete Mathematics, Machine Structures,
B.S. in Computer Science	Web Software Development, Programming Methodology,
3.53 GPA	Operating Systems, Analysis of Algorithms, Programming
	Languages, Software Engineering, HCI, Multiplayer Game
	Development, UNIX Embedded Systems, Linear Algebra

SELECTED PROJECTS

Infection FPS Game   May 2020
- Worked in a team of 8 to create a multiplayer first-person shooter game in Unity C#.
- Implemented multiplayer lobby and gameplay functionality using Mirror High-Level Networking API.

Self-Driving Car Robot   May 2020
- Worked in a team of 4 to build an autonomous self-driving robot car with Raspberry Pi.
- Built multithreaded functionality to power and drive the robot in C using various sensors and interfaces.

Mecha Fighter VR Game   December 2019
- Worked in a team of 5 to create a multiplayer VR fighting game in Unity C# using the SteamVR SDK.
- Built controller motion gesture detection system to trigger game events and send over the network.
- Implemented networking using custom server written in Java.

BaySpace Image Posting Web App   August 2019
- Worked in a team of 8 as the GitHub manager to build a full-stack web CRUD application.
- Built the server using NodeJS, ExpressJS, Amazon Web Services, and MySQL.
- Built account registration system with password encryption and authentication for uploading images.
- Built admin page with basic CRUD capabilities to modify database entries submitted by users.

Bomberman Java Game   May 2019
- Built a 4-player game in Java 11 using the Swing GUI toolkit and utilizing OOP principles.
- Developed fast collision detection system that runs every frame using the Visitor design pattern.
- Developed an algorithm to calculate 4-direction bomb explosions based on nearby collisions.

SKILLS

Coding Languages	C#, Java, C++, Python, HTML, CSS, JavaScript, Node, ExpressJS, Angular, React, ASP.NET Core, Razor Pages, Blazor, MySQL, MongoDB, Springboot, Swift
Technologies	Amazon Web Services, Maven, Gradle, Docker, Raspberry Pi
Spoken Languages	English, Vietnamese, Japanese