








BRIAN LAI

DEVELOPER

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SKILLS

Development

- Java
- C#
- C++
- C
- NodeJS
- Angular
- ReactJS
- CSS
- HTML
- JavaScript
- TypeScript
- Python
- PHP
- Ruby

TECHNOLOGIES

Applications

- IntelliJ IDEA
- Rider
- CLion
- WebStorm
- Visual Studio
- Visual Studio Code
- Unity
- NetBeans
- ProCreate
- Sketch
- Figma
- Adobe Photoshop
- Blender

Frameworks

- UNIX Shell
- ExpressJS
- MySQL Database
- MongoDB
- Selenium

Services

- Git / GitHub
- Amazon Web Services
- Google Cloud Platform

OTHER SKILLS

- English
- Vietnamese
- Japanese
- Art (drawing)

EDUCATION

Computer Science, BS

San Francisco State University
August 2016 - May 2020
3.47 GPA

SELECTED PROJECTS

RPG Sandbox

September 2019

Developed top-down click to move and attack core combat system for RPG game in Unity using NavMesh. Features core RPG elements like equipment, character stats, enemy AI, and more. Created high-fidelity shaders using Unity Shader Graph and Universal Render Pipeline.

BaySpace

August 2019

Worked on front-end, back-end, and Git management for a team of 8 as the GitHub admin. Our team exercised the software development process which includes iterative deployment, scrum meetings, and test-driven development. The web app is written in NodeJS and Bootstrap, uses MySQL database, and deployed on AWS using the Express framework. Users can submit posts, upload images, search posts, view map of locations, and register and sign-in.

Bomberman

May 2019

Developed a 4-player bomberman game in Java with an algorithm for calculating explosions which determines how far the explosion will extend in 4 directions and randomized map generation. Collisions are used for kicking bombs and solid interactions.

Tank Game

April 2019

Developed a 2-player top-down shooter tank game in Java that includes a collision detection system using the Visitor Pattern. Features include health UI, powerups, destructible walls, custom maps, and more.

Interpreter

March 2019

Programmed an interpreter that reads byte codes from a file written in the mock language X. Each byte code performs a specific action while managing a runtime stack and frames.

Shell

March 2019

Built a shell command-line interface in C that features common shell commands like cd, ls, etc. The shell can start from any shell client and it uses semaphores and mutex locks for various functions such as pipes.

A2Vellum

December 2018

Designed and developed a front-end focused fictional company product website using Bootstrap, HTML, CSS, JavaScript, PHP, and various open-sourced JavaScript libraries such as AnimeJS, JQuery, Moment, BLK Design System, and more.

Bowlmaster

March 2018

Created a 3D bowling game in Unity and C#, exercising test-driven development. Features include 3D physics and real bowling scoring system. The game is deployed on the web using WebGL.