



# BRIAN LAI

## DEVELOPER

### SKILLS

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#### Development

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

#### Traditional

English  
Vietnamese  
Japanese  
Art (drawing)

### TECHNOLOGIES

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#### 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

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### EDUCATION

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#### Computer Science, BS

San Francisco State University

August 2016 - May 2020

3.47 GPA

Worked in Software Engineering team of 8 as GitHub master role.

Exercised team software development process: iterative deployment, scrum meetings, and test-driven development.

### SELECTED PROJECTS

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#### 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.

#### BaySpace

August 2019

Worked on front-end, back-end, and Git management for a team of 8. The web app is written in NodeJS and Bootstrap, uses MySQL database, and deployed on AWS using the Express framework. Users can submit posts and upload image.

#### Bomberman

May 2019

Developed a 4-player bomberman game in Java with algorithms for calculating explosions and randomized map generation. Collisions are used for kicking bombs and other 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

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

#### A2Vellum

December 2018

Designed and developed a fictional company product website using Bootstrap, HTML, CSS, JavaScript, PHP, and various open-sourced JavaScript Libraries.

#### 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.