Jason Hoang

jasonbuihoang@gmail.com | linkedin.com/in/jbhoang | jbhoang.github.io | github.com/JBHoang

Education

Simon Fraser University - Burnaby, BC August 2021

- Bachelor of Science, Major in Computing Science

Experience

Junior Software Engineer – MDA Space July 2022 – September 2022

- Designed, coded, tested, and deployed C++ for MDA's Global Procedure Designer V15 software used to create flight procedures and charts for the US Air Force and Nav Canada

Systems Test Engineer Intern – Ballard Power Systems January 2019 – August 2019

- Lead, maintained, tested, and troubleshooted 10 different supplier humidifiers for hydrogen fuel cell applications
- Collected and analyzed humidifier data in LabVIEW, Excel and SQL assisting in management's humidifier purchasing decisions, saving $10,000 semi-annually
- Presented data weekly to systems engineering team and wrote reports for internal and external manufacturers

Primary Care Paramedic – British Columbia Emergency Health Services September 2015 – Present

- Respond to emergency calls, assess over 1000 patients yearly and make decisions based on clinical presentations
- Provide emergency treatments and administer emergency medications to patients
- Collaborate with up to 20 team members consisting of public servants and health care professionals

Projects

Pacman Arcade Game – Unity, C# July 2024 – Present

- Coding and designing the tilemap maze for Pacman

Tic Tac Toe Game - Monte Carlo Tree Search – Python May 2024 – June 2024

- Coded and implemented an undefeatable AI using Monte Carlos Tree Search
- Developed AI to simulate 5000 random games each turn to determine the best move

Asteroids Arcade Game – Unity, C# May 2024

- Coded C# script for player spaceship movement, missile projectiles, player respawn, asteroid spawning, score keeping and main menu options
- Implemented the random spawning of asteroids every 2 seconds in a radius of random sizes

Pong Arcade Game – Unity, C# February 2024

- Coded and created 3 AI difficulties called Easy, Medium and Impossible resulting in a player win rate of 50% to 0%
- Coded C# script for player paddle movements, AI logic, pong ball movement, and score keeping
- Integrated Unity 2D Physics Engine's rigid body detection and collision detection for the paddle and pong ball

React Personal Website – React, JavaScript, HTML, CSS, GitHub January 2024

- Deployed and hosted React application through GitHub pages
- Designed and implemented personal profile to include Projects, Skills, GitHub, LinkedIn, and Resume

Technical Skills

- **Languages:** Python, C, C++, C#, SQL, HTML, CSS, JavaScript
- **Databases:** MongoDB, PostgreSQL
- **Framework/Tools:** Linux, VS Code, Unity, Git, Jira, NumPy, Pandas, Agile/Scrum, MATLAB, LabVIEW, React