

# Jason Hoang

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## Education

### Simon Fraser University - Burnaby, BC

August 2021

- Bachelor of Science, Major in Computing Science

## Experience

### Junior Software Engineer - MDA

July 2022 - September 2022

- Designed, coded, tested, integrated, deployed, debugged and documented high quality C++ software for the Satellite Ground Segment as part of the Geointelligence Engineering Team

### Systems Test Engineer Intern - Ballard Power System

January 2019 - August 2019

- Lead, maintained, tested, and troubleshooted humidifiers for hydrogen fuel cell applications
- Collected and analyzed data from humidifier test stations using LabVIEW, MATLAB, and Excel
- Followed safety requirements for the assembly of humidifier test stations
- Presented results 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 firefighters, police officers and all health care professionals

## Projects

### Tic Tac Toe Game - Monte Carlo Tree Search - Python

May 2024 - June 2024

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

### React Personal Website - React, JavaScript, HTML, CSS, GitHub

May 2024

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

### Asteroids Arcade Game - Unity, C#

February 2024

- Coded the movement of the player spaceship, player death, player respawn and bullet projectiles
- Implemented the random spawning of asteroids every 2 seconds in a radius of random sizes
- Coded the collision between bullets and asteroids to destroy asteroids or split them into smaller asteroids
- Kept track of player score and player lives

### Pong Arcade Game - Unity, C#

January 2024

- Coded player paddle movements and physics to deal with object collisions
- Created an AI to track the location of the ball and move the computer paddle accordingly
- Added physics to the ball to increase its speed with each bounce
- Set up the game UI and kept track of player scores

## 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