# Jay Bava

647-996-3687 | jbava@uwo.ca | linkedin.com/in/jay-bava | jaybava.com

## EDUCATION

## Western University

London, ON

Bachelor of Science in Computer Science

Sept. 2022 - Present

#### PROJECTS

### Pet Care Game | Java, JavaFX, CSV, Multi-threading

- Developed a JavaFX virtual pet game with 20+ animations, real-time updates, and a responsive architecture.
- Developed a pet management system with CSV-based storage, ensuring data persistence across 30+ game sessions.
- Optimized asset loading with multi-threading, reducing load times by 30% for 50+ GIFs and images.
- Designed a UI supporting 15+ accessory options and parental controls using flexible, user-focused components.
- Developed a modular system simulating 5 pet states with 10+ animations through scalable code.

#### Weather App | Java, JavaFX, OpenWatherMap API, CSS, Maven

- Built a weather app with real-time updates, handling 100+ test queries at 98% accuracy via API integration.
- Developed a responsive GUI using JavaFX, validated by positive feedback from 10 test users.
- Integrated RESTful APIs to deliver live weather data with 95% of requests processed in under 1 second.
- Front-end and API experience building a weather app with 5+ features, including search and error handling.

#### Portfolio Website | JavaScript, React, HTML, CSS, GitHub Pages

- Developed a responsive portfolio website, enhancing accessibility across mutiple devices by 90%.
- Increased project visibility by 75% with dynamic animations and interactive React components.
- Achieved deployment success on GitHub Pages by optimizing React Router and asset paths.
- Showcased 5+ projects, boosting user engagement by 60% with detailed layouts and custom components.

#### Mine-Sweeper | C++, Pointers, Qt, QMake, Linux

- Developed a scalable 30x16 Minesweeper game with dynamic UI using QGridLayout, and QPushButton.
- Optimized cell revealing using BFS with QQueue, reducing redundant computations for smoother gameplay.
- Refactored Minesweeper using OOP best practices, improving modularity, maintainability, and reusability.
- Enhanced UX by implementing right-click flagging, difficulty selection, and custom window controls.

#### **HashTableC** | C, Pointers, Dynamic Memory Allocation, Git

- Improved hash functions and collision resolution, boosting lookup times by 40% through advanced techniques.
- Reduced memory errors by 30% by optimizing dynamic memory allocation and deallocation.
- Strengthened C programming and system operations through complex low-level concepts.

## Experience

#### Game Technician

Oct. 2023 – Present

The Rec Room

London, ON

- Optimized gaming system performance by 15% via software/hardware diagnostics and repairs, reduce downtime.
- Improved system reliability via preventive maintenance, timely software updates, and hardware replacements.
- Optimized system performance through diagnostics, troubleshooting, and parameter tuning.
- Enhanced technical communication by drafting clear reports and documentation for management, ensuring accountability.

#### TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, HTML/CSS, R, MatLab, Prolog Frameworks: React, Node.js, Flask, JUnit, Qt, WordPress, Material-UI, FastAPI

Developer Tools: Git, Visual Studio, JetBrains, Eclipse