

# Jonathan Wen

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## RELEVANT EXPERIENCE

### Frontend Developer

May – Aug 2025

*Muslim Social Services Waterloo Region*

- Developed and refined **UI/UX** for new blog features using the Wix Developer Toolkit, improving content discoverability and user engagement
- Performed comprehensive website **UX, accessibility, and SEO audits**, implementing improvements to layout, navigation, and search visibility
- Implemented responsive blog pages with vanilla **HTML, CSS, and JavaScript**, ensuring consistent experience across desktop and mobile

## PROJECTS

### AI-Powered Movie Recommendation Platform

*React, TypeScript, JavaScript, Tailwind CSS, Node.js, Express, TMDB API, LLaMA (Ollama), REST APIs - 🐙 GitHub*

- Built a **full-stack movie discovery and recommendation platform** using React and Node.js, enabling users to like movies and receive personalized AI-generated recommendations.
- Built an interactive **React + TypeScript + Tailwind** frontend for movie discovery, enabling users to browse, like, and view recommendations through a responsive card-based UI.
- Developed a **Node.js/Express backend** integrating an **open-source LLaMA model** to infer user preferences and generate personalized movie recommendations.
- Implemented a **robust AI → data resolution pipeline**, mapping LLM-generated movie titles to real TMDB entities via search, validation, and fallback logic.

### Mobile Cryptocurrency Price Tracker

*React Native, JavaScript, CoinGecko REST API, React Native Charts, GitHub - 🐙 GitHub*

- Developed a **cross-platform mobile application using React Native** to track live and historical cryptocurrency data via the CoinGecko API.
- Built interactive **mobile price history visualizations** to display market trends and performance over time.
- Implemented dynamic sorting, search functionality, and responsive mobile UI using **React Native components** and **state management**.

### Biquadris — Multiplayer Tetris-Style Game Engine

*C++ , Object-Oriented Design, MVC, Design Patterns - Grade: 96% - 🐙 GitHub*

- Designed and implemented a **multiplayer Tetris-style game engine** using a clean **MVC architecture**, separating game logic, input handling, and rendering.
- Applied **design patterns** including **Decorator, Factory, Template, and MVC** to ensure extensibility across blocks, levels, special effects, and rendering modes
- Engineered the system for **resilience to change**, enabling new blocks, levels, commands, and effects to be added with minimal code changes.
- Collaborated in a team environment, emphasizing **low coupling, high cohesion**, and adherence to **SOLID principles**, resulting in a maintainable and extensible codebase.

## EDUCATION & RELEVANT COURSEWORK

### University of Waterloo

Anticipated Graduation: April 2029

*Bachelor of Computer Science & Finance*

*Waterloo, ON*

#### COMPUTER SCIENCE

Data Structures and Algorithms  
Software Development Tools  
Object-Oriented Programming

#### FINANCE

Global Capital Markets  
Accounting for Private Companies  
Financial Data Analysis

#### MATHEMATICS

Linear Algebra  
Statistics & Probability  
Logic & Mathematical Proofs

## SKILLS

- **Languages:** C, C++ , Python, Java, C#, JavaScript/TypeScript, HTML/CSS, SQL, R
- **Frameworks & Libraries:** React, React Native, Bootstrap, Angular, Node.js, Express, NumPy, Pandas, Matplotlib, ASP .NET
- **Tools & Technologies:** Git/GitHub, Linux (Bash, CLI utilities), RESTful APIs, UML, Figma, Claude Code, HTTP