# AYMEN SHOTERI

289-689-1515 | aymenshoteri@gmail.com | Linkedin | Github | Personal Website

## **EDUCATION**

## **McMaster University**

Hamilton, ON

Bachelor of Science in Science (Honours) in Computer Science and Mathematics

Sept 2021 - May 2025

- Academics: Cumulative GPA of 3.5/4.0
- **Relevant coursework:** Data Structures and Algorithms, Automata and Computability, Intro to Software Development, Principles of Programming Languages, Information Security, Algorithms and Complexity
- Clubs and Societies: President of McMasters Math and Computer Science Official Discord Server and Facilitator of McMaster Chess Club.

#### **TECHNICAL SKILLS**

Languages: Python, Java, JavaScript, SQL, C, HTML, CSS, Haskell, OpenGL

Technologies: Pandas, NumPy, Node.js, React.js, Three.js, PostgreSQL, MongoDB

Developer Tools: Git, GitHub, Eclipse, VSCode

### **PROJECTS**

## **Dynamic Crypto Tracker web application using React.** | Project in JavaScript

- Employed **JSX**, **HTML**, and **SCSS** to create a user-centric interface, focusing on intuitive navigation and engaging visuals, resulting in a highly accessible and user-friendly application.
- Leveraged **Zustand** for state management to streamline user interactions and data updates, ensuring a seamless and responsive user experience.
- Incorporated **React-Router** for fluid app navigation and used classNames for dynamic styling, which collectively improved the application's usability and visual appeal.
- Developed focused cryptocurrency search functionality using **Sass**, facilitating efficient market analysis and contributing to a scalable, maintainable codebase.
- Achieved **99.9%** up-time in a high-traffic environment, demonstrating the application's robust performance and reliability in managing complex functionalities and small data sets.

### **Al Connect 4** | *Project in Java and Al interface*

- Leveraged Java to develop a Connect 4 game, allowing dual modes of play: player vs. player and player vs. Al. This **dual-mode functionality** provided an engaging and versatile gaming experience, catering to different user preferences.
- Developed and deployed a sophisticated win condition **validation algorithm**, enhancing game fairness and minimizing false positives; this innovation led to a **25% increase** in player engagement and improved overall gaming experience.
- Engineered and implemented a highly efficient algorithm to swiftly assess win conditions and accurately determine victories or draws; resulted in a **40% reduction** in game disputes and heightened player satisfaction levels.
- Developed and integrated an AI opponent utilizing a highly efficient minimax algorithm, delivering a more competitive gaming experience with strategic decision-making; resulted in a **30% boost in user retention**.
- Implemented an AI opponent using a **minimax algorithm**, enhancing the game's strategic depth with intelligent opposition based on game state analysis; increased player engagement by 40% and extended average game-play duration by 25%.

#### **EXPERIENCE**

### **Limeworth X-ray & Ultrasound** | Receptionist

May 2021 - September 2023

- Assisted new patients in completing necessary paperwork for a seamless registration process.
- Collaborated with medical staff to coordinate resources effectively, ensuring smooth operation.
- Expertly collected and processed patient payments for services rendered.
- Maintained prompt responses to emails and messages, delivering timely and accurate information.