# Waleed Majbour – *Software Engineering Graduate*

Email: wmajbour@Hotmail.com | Phone: +1 (613) 794 – 7758, Ottawa, Canada

LinkedIn: linkedin.com/in/waleed-majbour-63a99418b/ | GitHub: github.com/wmajbour

## Technical Summary and Education

*Front-End Technologies:* HTML, CSS, JavaScript, React, Angular
*Back-End Technologies:* C#, .NET, RESTful APIs, Spring Framework
*Programming Languages:* Python, TypeScript, C, C++, Java, Assembly
*Database Management:* SQL, PostgreSQL, NoSQL [JSON]
*Cloud Services:* Microsoft Azure, AWS, Google Cloud
*Development Tools:* Git, CI/CD, STM32Cube, Docker, Kubernetes
*Paradigms:* Object Oriented, Functional, Imperative, Modular, Event-driven

**B.Eng., Software Engineering, 2019 – 2024**
Carleton University, Ottawa, Ontario

## Professional Experience

### Beamra

**Software Developer (Internship)** — Ottawa, Ontario | Aug 2022 – Apr 2024

- Developed and maintained high-performance web applications using React and TypeScript, ensuring scalability and user satisfaction.
- Created responsive user interfaces optimized for performance and usability, enhancing overall user engagement.
- Integrated RESTful APIs to support back-end services and improve data synchronization, resulting in increased operational efficiency.
- Participated in sprint planning and team meetings, collaborating closely with product teams to gather requirements and contribute to documentation

## Projects

**Cloud-Hosted AI Chat Bot (FlareFree)**
*Personal – WebDev (Azure, HTML/CSS/JavaScript, Python, OpenAI API)*

- Designed and deployed a full-stack web application for diet management and response tracking with an emphasis on user experience and responsive design.
- Deployed on Microsoft Azure, gaining hands-on experience with virtual machines, load balancing, and cloud-based storage.
- Implemented CI/CD pipelines for automated testing and deployment, minimizing downtime and ensuring continuous delivery.
- Architected the system for horizontal scalability and robustness under high concurrent usage.

**Multi-threaded Elevator Control Simulation**
*Carleton University – Java*

- Built a concurrent simulation of an elevator system using Java threads and finite state machines to manage scheduling and dispatch.
- Ensured thread-safe operation through synchronization techniques, eliminating race conditions and deadlocks.
- Applied software design patterns to enhance code modularity, maintainability, and real-world applicability.

**Operating Systems: Concurrent Process Management**
*Carleton University – C, Unix/Linux*

- Implemented multi-process systems with shared memory, semaphores, and IPC mechanisms to simulate OS-level task coordination.
- Designed and analyzed custom CPU scheduling and file management utilities to explore systems performance trade-offs.
- Applied structured software engineering methodologies using UML to document system components and workflows.

**Embedded Systems Development with TI MSP Microcontrollers**
*Carleton University & Personal – C, Keil UVision, STM32Cube*

- Engineered real-time embedded applications on TI MSP and STM microcontrollers with a focus on precision control and low-resource environments.
- Developed hardware abstraction layers for GPIO, timers, UART enabling seamless integration of hardware components.
- Optimized firmware for performance and memory efficiency, leveraging low-level C techniques for system stability.
- Performed rigorous debugging and performance testing using Keil UVision Studio and simulation tools to validate embedded functionality.