

# Mohamad Alkahil

Toronto, ON

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## SKILLS

**Programming Languages:** Python, Java, SQL, C, HTML, CSS, and JavaScript.

**Development Tools:** Git for version control, Azure for cloud services, Docker for containerization, FastAPI for building web APIs, gRPC for efficient communication, RabbitMQ for message queuing, JSON for data interchange, and Linux for development environments.

## EDUCATION

**Toronto Metropolitan University**

Graduated June 2023

**Bachelor of Engineering: Computer Engineering (Specialization in Software Engineering)**

**GPA:** 3.68/4.33, Graduated with Distinction, Dean's List Recipient 2019-2023

## PROJECTS

**FastAPI Rover**

March 2023 – April 2023

([https://github.com/MohamadAlkahil/FastAPI\\_Application](https://github.com/MohamadAlkahil/FastAPI_Application))

- Solely designed and developed a robust FastAPI server, enabling seamless RESTful communication between operators and the server.
- Implemented a user-friendly command-line application in Python for operators, ensuring efficient and intuitive interaction with the server.
- Successfully deployed the server as a Docker container and hosted it on Azure, providing a scalable and accessible web app.
- Engineered comprehensive features for map management, mine operations, and rover control, enhancing the system's functionality.
- Designed a visual representation of rover paths through a text file, improving data visualization and analysis capabilities.

**Book Management System**

March 2022 – April 2022

([https://github.com/MohamadAlkahil/Book\\_Management\\_System](https://github.com/MohamadAlkahil/Book_Management_System))

- Solely developed a comprehensive book database using SQLite.
- Designed and implemented a Java application with JDBC for seamless connectivity to the SQLite database.
- Crafted SQL queries to retrieve and display data, allowing users to select various options.
- Constructed an intuitive command-line interface, enabling efficient interaction with the book database.

**Banking Application**

March 2020 – April 2020

(<https://github.com/MohamadAlkahil/Banking-Application-Project>)

- Solely designed and developed a Java-based banking application, including the user interface using JavaFX.
- Implemented robust login validation and user authentication mechanisms.
- Utilized an SQLite database with JDBC for efficient storage and retrieval of customer and manager data.
- Employed the state design pattern to establish distinct account levels (Gold, Silver, Platinum) with corresponding fees.
- Created customer-specific features for balance retrieval, updating, and dynamic account level adjustments.
- Ensured data security by incorporating SHA-256 password hashing for enhanced user protection.

## WORK EXPERIENCE

**City of Toronto – Aquatic Coordinator**

June 2023 – Present

- Coordinated and managed operations for multiple pools, overseeing 40+ programs and a team of 70+ staff.
- Successfully facilitated training programs for 100+ staff, ensuring all learning outcomes were achieved.

**City of Toronto – Pool In-Charge**

March 2020 – Present

- Managed operations for high-capacity pools, supervising daily operations with 200+ public patrons and a team of 6+ staff.
- Communicated regulations, policies, and instructions clearly to staff and the public.
- Collaborated with a team to execute emergency procedures and successfully adapt to changing circumstances.

## CERTIFICATIONS

- sololearn JavaScript Intermediate September 19, 2023
- sololearn Python for Data Science January 14, 2023
- sololearn Introduction to HTML March 4, 2023