

Mahmoud Ibrahim

email: ibra0309@algonquinlive.com **Phone:** +1(613) 324-1184 **Address:** Ottawa, ON
linkedin: [linkedin.com/in/Mahmoud3Ibrahim](https://www.linkedin.com/in/Mahmoud3Ibrahim) **GitHub:** github.com/Mahmoud3Ibrahim
Website: [Mahmoud Ibrahim - Portfolio](#)

Summary

Dean's Honour List Computer Programming student at Algonquin College (**3.87 GPA**) with strong technical skills in **Java, JavaScript, SQL, PL/SQL** (Oracle), **MS SQL Server, Python, R**, and **full-stack** web development (**HTML, CSS, PHP, JavaScript**). Mobile application development with **Dart**. Proven self-directed learner with certifications in **Google Data Analytics** and **Python** programming beyond curriculum requirements. Experience with team-based development environments and **Agile/Scrum** methodologies. Demonstrated ability to build scalable applications, database systems, and **machine learning models** through hands-on academic projects. Quick learner with analytical mindset, **business and financial background**, strong track record of independent skill acquisition. **Permanent resident** eligible for co-op placements.

Education

Diploma in Computer Programming | Algonquin College, Ottawa, ON | 2024–2026
GPA: 3.87/4.0 | Focus: Java Development, SQL, Object-Oriented Programming, Web Development.
Bachelor of Commerce | Finance and Accounting | Alexandria University, Egypt
Focus: Financial Analysis, Business Management, Data Analytics.

Technical Skills

Programming Languages: Java, Python, SQL, JavaScript, HTML5, CSS3, PHP, Bash
Java Technologies: JDBC (Database Connectivity), DAO (Data Access Objects), Builder Pattern, GUI Development (Swing/AWT), JUnit Testing, Exception Handling
Testing: JUnit (Java Unit Testing), Basic Testing Concepts, Debugging.
Databases: Oracle, MySQL, MS SQL Server, PostgreSQL, PL/SQL, Database Design, Normalization, Stored Procedures, Triggers
Development Tools: Git, GitHub, Eclipse, Visual Studio, VS Code, Oracle SQL Developer, MySQL Workbench, pgAdmin, NetBeans, Android Studio
Data Analysis & BI: Power BI, Tableau, RapidMiner, R, Excel, MS Access, Dashboard Development
Operating Systems: Linux (File Management, Bash Scripting), Windows, VMware
Design Principles: Object-Oriented Programming (Encapsulation, Inheritance, Polymorphism), Design Patterns (Builder, DAO), Database Design, Normalization, Maven (Build Management)
Methodologies: Agile/Scrum Concepts, Version Control (Git), Software Development Lifecycle
Web Technologies: HTML5, CSS3, JavaScript, PHP, MySQL Integration, Responsive Design
Currently Learning: Power BI Dashboard Development, Dart/Flutter, C#, .NET

Academic Projects

Java Applications:

- *Student Management System (Java/SQL):* Enterprise-level application implementing DAO pattern with JDBC connectivity to SQL database. Built three-tier architecture separating presentation layer, business logic layer, and data access layer (DAO interfaces/implementations).
- *Fitness Tracker:* GUI application with JUnit testing, UML design, and calculation algorithms
- *Drum Inventory:* Inheritance-based architecture with polymorphism and geometric calculations

C# Applications:

- *Recipe Manager:* Modular OOP application with HashMap data structures and file I/O operations

Database Projects:

- *Movie Database (Oracle):* Normalized schema with PL/SQL procedures, triggers, and sequences

- *School Database (PostgreSQL)*: Optimized queries with indexing, subqueries, and performance tuning.

System Administration projects:

- *Linux User Management*: Bash scripts for automated user provisioning, permissions, and file operations.

Data Processing & Analytics:

Heart Disease Prediction (RapidMiner Project): Analyzed heart disease dataset, using RapidMiner. Applied K-Means Clustering to identify patient segments predict heart disease risk.

- *Large Dataset Processing*: Built Java application to extract, clean, and analyze data from multiple sources, implementing efficient algorithms for handling large volumes of data

- *Database Integration Project*: Developed data pipeline using Java JDBC to move and transform data between different database systems (Oracle, MySQL, SQL Server).

Full-Stack Web Applications:

- *Ottawa Movies Platform*: PHP backend with MySQL, user authentication, admin panel, search functionality, supported with CSS, HTML, and JavaScript.

- *Personal Portfolio Website*: Responsive HTML/CSS/JavaScript site showcasing development projects, developed and used as my portfolio.

All projects available on GitHub with complete documentation and source code

Professional Experience

Data Journalist | Youm7 Newspaper | May 2014 – Jan 2024

- Analyzed data from multiple sources to identify newsworthy patterns and trends
- Researched and validated data to ensure accuracy before publication
- Presented complex data in clear, accessible formats for general audience
- Worked with large datasets and public databases

Volunteer Experience

Founder & Team Lead | FALSO (Fake News Combat Initiative) | Dec 2019 – Jan 2021

- Led a 60-member volunteer team to counter misinformation during major news events
- Used data analysis and journalistic techniques to identify misleading narratives and reframe them accurately
- Collaborated with media partners to verify content and deliver clear, trustworthy information to the public

Certifications & Continuous Learning

Python Programming Fundamentals | University of Michigan (Coursera) | Jan 2025 – Present

Focus: Web development, data analysis, automation, and AI applications

Google Data Analytics Certificate | Google | Mar 2023 – Aug 2023

Skills: SQL, R, Tableau, data cleaning, statistical analysis, and business intelligence

Core Competencies

- **Data Processing**: Experience with large-scale data extraction, transformation, and analysis
- **Database Integration**: Worked with multiple database systems and data migration
- **Problem Solving**: Strong analytical skills from journalism and finance
- **Quick Learning**: Proven ability to self-learn new technologies (3.87 GPA + certifications)

References available upon request.