

# Ousama Alabdullah

Canadian Citizen | OusamaHALabdullah@gmail.com | +1 (647)-997-4413 | [LinkedIn: Ousama Alabdullah](#) | [Github: OusamaAb](#)

## EDUCATION

### Toronto Metropolitan University

Toronto, Ontario

B. Eng in Software Engineering

Expected Graduation, May 2026

- **Certifications:** AWS Certified Cloud Practitioner, AWS Certified AI Practitioner, AWS Certified Solutions Architect

## EXPERIENCE

### Ministry Of Transportation Ontario

Toronto, Ontario

Software and Data Engineering Intern

May 2024 – Present

- Developed a Python script to extract traffic data from the HERE traffic platform via XML, utilizing Shapely and GeoPandas to clean and process spatial data, enabling accurate route-based traffic data extraction and filtering
- Managed Oracle database systems using SQL, ensuring data integrity and security through rigorous code reviews that adhered to safety protocols
- Developed a PowerApps-based ITS Systems Inventory app, increasing task automation by 50% and reducing system lookup time by 30% with an interactive map for filtering by area or highway segments
- Designed and implemented automated ETL pipelines that consolidated traffic data from multiple sources (HERE, TomTom, Waze), reducing manual processing time by 45% and improving data completeness across 13 unique routes
- Streamlined development and deployment of PowerApps solutions using Microsoft DevOps for version control and pipeline management, improving release efficiency by 30% and enhancing collaboration across the Microsoft platform

### Vanguard Financial

Mississauga, Ontario

Data Analyst Intern

April 2021 – July 2021

- Improved SQL queries to speed up data extraction by 35%, making weekly reports faster and more reliable
- Automated data cleaning and processing in Python which saved 40+ hours per month and improved accuracy to 99%
- Built dashboards in Power BI and Tableau that helped teams view key trends instantly, increasing report usage by 60% and cutting extra report requests by 25%

### NextGen Systems

Mississauga, Ontario

PC Builder and Troubleshooter

Jun 2019 – June 2023

- Constructed personalized computer systems tailored to individual customer requirements
- Resolved PC hardware and software issues, including hardware failures, driver problems, and compatibility issues
- Delivered tailored solutions, simplifying complex concepts for non-technical clients

## PROJECTS

### Robot Guidance

Team Member

Sept 2023 – Nov 2023

- Developed a robot guidance system with the HCS12 microprocessor and EEBOT, achieving precise navigation and obstacle detection
- Coded in Assembly, implemented sensor interfacing, control algorithms, and real-time communication to enhance autonomy and responsiveness

### Football Pick 'Ems

Mississauga, Ontario

Personal Project

May 2025 – Present

- Web app that combines the thrill of sports betting with the social competition of fantasy leagues, offering risk-free match predictions, scoring, and leaderboards.
- **Frontend:** React.js + Next.js with Tailwind CSS for an interactive, responsive UI
- **Backend:** AWS serverless stack (Lambda, API Gateway, DynamoDB/RDS, S3, Cognito) with RESTful APIs for predictions, scoring, and leaderboards
- Implementing a cache-based system to store and serve match data outside game hours, reducing API calls and boosting performance

## SKILLS

**Programming:** Java, Python, JavaScript, SQL, Next.js, React.js, MATLAB, C++, C, Linux

**Tools:** Microsoft Power Platform, Microsoft DevOps, PyCharm, Visual Studio Code, AWS, Jupyter Notebooks, Git