

# INSTITUTE FOR CO-OPERATIVE EDUCATION

## **ABDELMALEK ANES**

Montreal, H3W (Open to Remote) | (514) 632-6771 | ab anes@live.concordia.ca

LinkedIn | GitHub | Website

Languages: French, Spoken & Written | English, Spoken & Written | Arabic, Spoken & Written

#### **SUMMARY OF SKILLS AND QUALIFICATIONS**

Front End | React, Tailwind CSS, MUI

Back End | Java, C#, C, C++, Python, JavaScript, TypeScript, NodeJS, SQL, NoSQL

Other | MS Azure, Power BI, Junit, Vercel, Git, Next.js

#### **WORK EXPERIENCE**

#### Embedded Software Developer Intern at Caterpillar / Montreal QC

Fall 2024 - Winter 2025

- **Embedded Software Development:** Designed and implemented embedded software applications for autonomous and staffed mining machines using C++, ensuring high performance and reliability
- Automated Testing Procedures: Developed automated test procedures to validate software modules, enhancing the reliability and efficiency of the testing process
- **Engineering Documentation Review:** Analyzed requirements, specifications, and validation test plans to align software development with project goals and standards
- **Scaled Agile Collaboration**: Worked in a scaled Agile environment, collaborating with cross-functional teams to optimize development and testing workflows

#### Software Developer Intern at Bombardier Inc. / Dorval, Montreal QC

**Summer 2023** 

- Advanced Database Management: Utilize filtering to extract and analyze employee data, employing Power BI and DAX for comprehensive reporting and insights
- **Day-to-Day Task Automation:** Streamline routine processes using Python, Power Automate, and Excel VBA to enhance operational efficiency and accuracy
- SQL Database Hosting on Microsoft Azure: Leverage Azure's cloud capabilities to host and manage SQL databases, ensuring scalability, high availability, and secure access to database services
- Presented Automation Benefits: Delivered a presentation to senior management outlining automation's efficiency gains, cost reductions, and accuracy improvements for the department

#### **PROJECTS**

#### SmartClass A.I.ssistant / Concordia University, Montreal QC

Summer 2024

Develop a CNN to analyze student facial responses in real-time and accurately identify the displayed emotions

Resources/Libraries used: Python, Matplotlib, PyTorch

Othello Strategy Game / Concordia University, Montreal QC

Summer 2022

Develop an oriented strategy game with a robust back-end architecture

Resources/Libraries used: Java

### **EDUCATION**

Vanier College - DEC, Health Science Concordia University - Bachelor of Engineering, Software Engineering 2019-2021

2022-2025