ABDEL RAHMAN IBRAHIM

abdelrahmanibrm.com

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EDUCATION

Université de Montréal, Montréal, Quebec   *Expected graduation, May 2026*
Bsc. in Mathematics and Computer Science
- **Concentrations:** Machine Learning, Networks
- **Related Coursework:** Data Structures and Algorithms, Web Design, Computer Architecture and Programming, Combinatorics, Object-Oriented Programming, Statistics and Applications, Linear Algebra, Real Analysis.

EXPERIENCE

101.org   Cairo, Egypt (Remote)
Web Development and Design, Volunteer   June 2021 – Present

- I contribute to the organization's online presence by maintaining the website, designing and building web applications, and creating graphics to enhance visual content.

PROJECTS

Timetable Manager   Montreal, QC
Project Link: https://github.com/AbdelRahm4n/timetable-manager   June 2023

- Application built with Java designed to help students manage their schedules efficiently. The app provides features for adding, modifying, and viewing courses, including lectures, labs, and exams. Currently working on a GUI to make it a webapp.

Machine Learning emotion detector   Montreal, QC
Project Link: https://github.com/AbdelRahm4n/emotionDetectorML   November 2023

- A real-time emotion detection system implemented using Python, OpenCV, and a pre-trained deep learning model. The project captures video input from a webcam, detects faces in the frames using the Haar Cascade classifier, and then applies a pre-trained Convolutional Neural Network (CNN) model to recognize the emotion expressed on each detected face.

Self-playing Flappy Ghost   Montreal, QC
Project Link: https://github.com/AbdelRahm4n/flappy-ghost-ml   December 2023

- Developed a mini-game, Flappy Ghost (a variation of Flappy Bird with moving obstacles), using Java and JavaFX for the graphical user interface. Implemented autonomous gameplay by integrating a custom-built machine learning model. The ghost character is controlled by the model, which makes real-time decisions based on the current game state. The machine learning components, including the neural network and training logic, were coded from scratch without relying on external libraries.

Spotify playlist generator   Montreal, QC
Project Link: https://github.com/AbdelRahm4n/moodify-tunes   January 2024

- Developed MoodifyTunes, a web application for personalized playlist curation using the Spotify API based on facial expressions analysed using a machine learning model built with python (TensorFlow). The frontend is powered by TypeScript, Next.js, Framer Motion and Tailwind CSS, offering a dynamic and responsive user interface.

Interactive e-book viewer   Montreal, QC
Project Link: https://github.com/AbdelRahm4n/ebook-view   January 2024

- This project is a web application that serves as an interactive ebook viewer with audio functionality. It is built using Next.js for a seamless and efficient user experience, TypeScript for type-safe code, and Tailwind CSS for a clean and responsive design.

SKILLS

- **Relevant Coursework:** Data Structures and Algorithms, Web Design, Computer Architecture and Programming, Combinatorics, Object-Oriented Programming, Statistics and Applications, Linear Algebra, Real Analysis, Discrete Mathematics.
- **Programming:** Java, Python, Pytorch, TensorFlow, SciKit-Learn, JavaScript, HTML, CSS, Next.js, Node.js, React.js, TypeScript, Framer Motion, R, Assembly.
- **Software:** IntelliJ, PyCharm, VSCode, AWS, Jupyter Notebooks, Git, Photoshop, Illustrator.