# Yacine Betouche

# Artificial Intelligence Engineer

#### **SUMMARY**

Highly motivated **AI Developer** with a strong foundation in various programming languages and technologies. Currently a 2nd-year Engineering student at USTHB. Demonstrated expertise in Al-driven applications, machine learning models, and computer vision solutions. Proficient in **Python**, **Java**, **C#**, and **C++**, with hands-on experience using **TensorFlow**, **Keras**, and **OpenCV**. Skilled in deep learning architectures (**GANs**, **CNNs**, **ResNet**, **U-Net**) and **reinforcement learning** (**policy gradient**). Experienced in image processing, computer vision, and building innovative image editing applications. Strong analytical skills and attention to detail, with a proven ability to deliver solutions under tight deadlines. Committed to continuous learning and leveraging AI to solve real-world problems.

# **EDUCATION**

**University of Science and Technology – Houari Boumediene,** BAB EZZOUAR – ALGERIA — science and technology studies

September 2022 - Present

# **PROJECTS**

# Open Dino - Al Based Video Game

An innovative Al-driven game, Open Dino, which allows players to control their character through hand gestures (open/close). The gameplay is inspired by the classic browser-based Dino game, offering an engaging and interactive user experience.

<u>ImageColorizer</u> — Two Different Image Colorization Models Using GAN & CNN Developed an image colorization model using GANs and CNNs to convert grayscale images to color. Achieved impressive results and evaluated performance using PSNR.

#### RenderMe — C++ 3D/2D OpenGL Rendering Library

RenderMe is an open-source 3D/2D rendering library, made with C++ using OpenGL API, I built this to use it on my Qt Applications and some future game projects

## PhysicsEngine - Java / OpenGL Game Engine

Developed a Java-based game engine with OpenGL in just three months, showcasing professional expertise in software development and game engine architecture.

#### <u>VidFast++</u> — C++ Video Editing Application

VidFast++ is a C++ console-based video editor that supports cutting, merging, and applying effects, offering a fast and efficient, GUI-free solution.

# **SKILLS**

• Programming Languages: Java, C#,C, C++, Python, Javascript, TypeScript, Matlab

#### • Frameworks /Libraries:

Tensorflow, Keras, Pandas, Numpy, React, Node.js, Mediapipe, OpenCV, Java Swing, OpenGL, Qt

- Tools And Technologies: Unity, Qt Designer, Jupyter Notebook, Esp32, Arduino, REST API, Docker
- Version Control: Git/GitHub
- IDEs and Code Editors: Visual Studio, VSCode, IntelliJ, Sublime Text
- Data Bases: MongoDB
- Mathematics: Strong problem-solving and analytical skills
- **Physics:** Solid understanding of physics principles and their application in software development
- **Soft Skills**: Strong Attention to detail, highly, Organization and Time Management

#### CONTACT

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Github - goneyacine

**Upwork - Yacine B** 

## **LANGUAGES**

Arabic - English