Ahmed Ali **Mohamed Yassine** Embedded Systems Engineer, Low-Level Developer

? Tunis, Tunisia

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Github: YASSINE-AA Portfolio: YASSINE-AA



PROFESSIONAL EXPERIENCE

Jul 2024 Jul 2024

Backend Developer | Internship - Mobelite, CENTRE URBAIN NORD, TUNIS,

- > Developed a chunk-based upload system.
- > Increased transfer throughput by 40% through packet optimization.
- > Implemented in Java with automatic resume functionality.

Java Network Optimization Multipart Upload Backend Git

Jan 2023 May 2023

Final Year Project — Trackify | ST2I / FST - Embedded Systems, TUNIS,

- > Designed and developed a complete vehicle tracking solution.
- > Developed a web visualization interface using Angular and Express.js.

Angular Express.js IoT Embedded Systems Web Fullstack



EDUCATION

Embedded Systems Engineering at Higher Institute of Computer Science Present

2020-2023 Bachelor's Degree in Embedded Systems (Honors) at Faculty of Sciences of

Tunis (FST)

2020 Baccalaureate in Mathematics at Pères Blancs High School, Menzah 4

PROJECTS

GOOEYBUILDER - SPECIALIZED IDE

2025-PRESENT

Designed a powerful IDE for GooeyGUI featuring a visual editor with compilation to accelerate embedded GUI development. ANSIC GUI Compilation Embedded Frameworks

GOOEYGUI - GRAPHICS FRAMEWORK

2024-PRESENT

Engineered a lightweight, cross-platform graphics library optimized for embedded systems with multi-windowing support. ANSI C Embedded Systems Graphics Wayland Win32 API

GLIMPSE - WINDOWING SYSTEM

Implemented a robust, cross-platform window management system supporting Win32, Wayland, and X11 environments. Win32 Wayland X11 Embedded Systems

PyValoAPI - Unofficial Valorant API

2023

Developed a sophisticated Python library interfacing with Valorant's client API. Published on PyPi. Python REST API Reverse Engineering PyPi HTTP

SMART GARAGE - FINAL YEAR PROJECT

Delivered an end-to-end IoT security solution for garages, integrating hardware and mobile app for remote monitoring. ESP32 Security Tot TensorFlow React Native

BLINK SFTP CLIENT - CROSS-PLATFORM SFTP CLIENT

2022

Created a feature-rich Java SFTP client with JavaFX UI, modular plugin system, and seamless auto-update capabilities. Java JavaFX JSch SFTP GUI

PHOTON IDE - PYTHON IDE

2022

Built a cross-platform Python IDE with embedded interpreter and syntax highlighting. PySide6 Python Regex

TINIFY - URL SHORTENING SERVICE

Developed a scalable, open-source URL shortening service using Python and Flask, emphasizing simplicity and performance. Flask Python HTTP

TECHNICAL SKILLS

> Embedded Systems:

ARM Cortex-M, STM32, ESP32, Arduino, Raspberry Pi, FreeRTOS, bare-metal

> Graphics/UI:

OpenGL ES, LVGL, TFT-eSPI, SDL, X11, Wayland, Nuklear, Dear ImGui, Qt (Embedded), Win32 API

> Tools:

Git, GDB, CMake, Make, STM32CubeIDE, Keil µVision, PlatformIO, Logic Analyzer, Oscilloscope

> Protocols:

UART, SPI, I2C, CAN, USB, TCP/IP, MQTT, BLE, HTTP



- > Microsoft Certified : Azure Al Fundamentals (AI-900) - Microsoft
- > Excel Certification Microsoft
- > Python for Data Science, Al Development – Coursera
- > Data Analytics, Storage, Mining Visual Big Data Technologies - Udemy

PERSONAL SKILLS

- > Leadership
- > Teamwork
- > Active listening
- > Adaptability

LANGUAGES

- > English
- > French
- > Arabic



SOCIAL EXPERIENCE

- > Competed in the CTF challenge at Securinets ISI | 2025, **ENIT Tunis**
- > Participated in the IEEE Extreme Hackathon | 2022, FST Tunis

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