

CONTACT

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- Alger, Algérie
- LinkedIn
- GitHub

LANGUAGES

- Arabic
- Native
- French
- Fluent
- English
- Fluent

CORE SKILLS

- Network Security & Encryption
- Machine Learning & AI
- Linux Systems & Virtualisation
- Python / Java / C++
- Full-Stack Web Development

TECH STACK

- Python
- Scikit-learn
- XGBoost
- TensorFlow
- Linux
- VMware
- CRIU
- free5GC
- React
- Node.js
- MySQL
- Azure
- Bash
- Git

AREAS OF INTEREST

- Diplomatic Cybersecurity
- Network & Information Security
- Artificial Intelligence
- Distributed Systems
- Digital Transformation

ACTIVITIES

- Student Club Member — ESI
- Peer Tutoring & Academic Support
- Community Volunteering

Yahia Abdeldjalil
Benyahia

COMPUTER SCIENCE ENGINEER · NETWORKS & SECURITY · ESI ALGIERS

Final-year engineering student at ESI Algiers — Algeria's most selective computer science institution — specialising in Software & Networks. Hands-on expertise in network security, machine learning, and systems virtualisation. Final-year project focuses on encrypted QUIC traffic classification, directly relevant to securing institutional communications. Trilingual in Arabic, French, and English. Eager to contribute technical skills to the modernisation and security of information systems in service of Algeria's diplomatic mission.

EDUCATION

École Nationale Supérieure d'Informatique — ESI2023 – 2026 (Expected)
Engineering Degree in Computer Science · Software & Networks Specialisation

- Coursework covering network architectures, operating systems, cybersecurity, and artificial intelligence.
- Ranked 23rd / 53 in Engineering Cycle Year 2.

École Nationale Supérieure d'Informatique — ESI2021 – 2023
Preparatory Cycle in Mathematics & Computer Science · Bachelor's Equivalent

- Ranked 22nd / 315 in Year 1 — admitted via national competitive examination.

BAC (Mathematics branch)2021
Average: 17.79 Very Good

INTERNATIONAL ACHIEVEMENT

3rd Place — NYUAD International Quantum Computing Hackathon

Represented Algeria at New York University Abu Dhabi, competing against teams from leading universities worldwide. Developed a quantum computing solution under time pressure — demonstrating advanced technical skills and international collaboration.

EXPERIENCE

Research Intern — CERIST (National Centre for Scientific and Technical Research)2024 · 3 months
Algiers · Systems Engineering & Virtualisation

- Implemented live process migration between Linux virtual machines using CRIU (Checkpoint/Restore In Userspace).
- Benchmarked three migration strategies: standard, diskless, and lazy — with documented performance analysis.
- Automated migration workflows through Bash scripting in a research-grade environment.

FINAL YEAR PROJECT

Encrypted QUIC Traffic Classification using Machine Learning2025 · Individual
Network Security · Machine Learning · Traffic Analysis

- Trained and evaluated 7 ML models (RF, MLP, KNN, XGBoost, HGB, LR, SVM) on the CESNET-QUIC22 dataset.
- Processed over 153 million network flows to classify 101 service labels hidden within encrypted traffic.
- Achieved classification *without decryption* — result: ~87% Macro F1-score.
- Directly applicable to anomaly detection and monitoring of secure institutional communications.

SELECTED PROJECTS

5G Network Simulation (uRLLC)
Python · free5GC · Network Engineering

Simulated a 5G core network and evaluated ultra-reliable low-latency communication (uRLLC) performance. Full technical report produced.

Live Virtual Machine Migration
Linux · CRIU · VMware · Bash

Live process migration between VMs exploring diskless and lazy strategies. Reproducible in secure production environments.

Charity Donation Platform
React · Node.js · MySQL

Full-stack web application for fund collection and beneficiary management, with an administration dashboard and donor tracking.

Graph Colouring — RL + Ant Colony
Python · Reinforcement Learning · ACO

Applied combinatorial optimisation (RL + Ant Colony) to large benchmark graphs, achieving optimal or near-optimal results.

CERTIFICATIONS

Threat ModelingCybrary

Fundamentals of Deep LearningNVIDIA Deep Learning Institute