LYDIA YAHIAOUI

🏠 Zerara Residential Area, Béjaïa 06000, Algeria

🌐 yahiaouilydia.github.io/Portfolio

🐱 github.com/YahiaouiLydia

PROFILE

I conduct research in cybersecurity using artificial intelligence at the Laboratory of Medical Informatics and Intelligent and Dynamic Environments (LIMED). I'm also passionate about software development and enjoy combining research with practical applications, while continuously exploring new technologies.

SKILLS

- **Programming:** Python, Java, JavaScript, Node.js

- **Web Development:** React, Express.js, HTML, CSS, Bootstrap

- **Databases:** PostgreSQL, MySQL, MongoDB

- **AI & Machine Learning**

- **Blockchain:** IOTA, Decentralized Identity, Hornet, Tangle

- **Tools :** Git, Docker, REST APIs

LANGUAGE

- English

- Arabic

- French

WORK EXPERIENCE

Teaching Assistant (Part-Time)   2022 – Present
University of Béjaïa
- Courses: Data Mining, Software Engineering, Web Services, Mobile Development, NoSQL

Full-Stack Developer Intern   Mar 2022 – May 2022
Provision Security Systems
- Built a microservices-based web app with React, Node.js, and PostgreSQL.

EDUCATION

Ph.D. Candidate, Networks and Cybersecurity
University of Béjaïa, Algeria | 2022 – Present

M.Sc., Software Engineering
University of Béjaïa, Algeria | 2020 – 2022

B.Sc., Mathematics and Computer Science
University of Béjaïa, Algeria | 2017 – 2020

Baccalaureate, Experimental Sciences
El Hamadia High School, Béjaïa, Algeria | 2017

PUBLICATIONS

Efficient and Reliable Predictive Maintenance in Trains using BiLSTM
Presented at the 21st International Wireless Communications and Mobile Computing Conference (IWCMC 2025), Abu Dhabi, UAE. To appear in IEEE Xplore.

Proactive Failure Prediction in Train Air Production Units using XGBoost
Presented at the 21st International Wireless Communications and Mobile Computing Conference (IWCMC 2025), Abu Dhabi, UAE. To appear in IEEE Xplore.

SEMINARS

Enhancing Security in Virtually Coupled Trains: Real-Time Communication Attack Detection and Predictive Speed Adaptation
LIMED Seminar – 16 April 2024

Predictive Maintenance in Railway Systems Using Explainable Artificial Intelligence
LIMED Seminar – 20 May 2025