

Adam Bouafia

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Education

Vrije Universiteit Amsterdam <i>Master's in Global Software Engineering (GSEEM) in Computer Science</i> <ul style="list-style-type: none">◦ Specialization: Software Engineering & Green IT	<i>Sept 2024 – Aug 2025</i>
Università degli Studi dell'Aquila <i>Master's in Global Software Engineering in Computer Science</i>	<i>Sept 2023 – June 2024</i>
Higher Institute of Computer Science of Mahdia <i>Bachelor's in Computer Science in Software Engineering & Information System</i> <ul style="list-style-type: none">◦ Final Grade: 15.2/20◦ Thesis: Mobile Security App 'M3ak'	<i>Sept 2019 – June 2022</i>

Experience

Flutter Intern <i>Make it Happen</i> <ul style="list-style-type: none">◦ Developed Fiberchat, a full chat & call app clone◦ Built a weather app using Flutter and APIs	<i>Monastir, Tunisia</i> <i>July 2021 – Sept 2021</i>
Developer <i>Atomic IT-Pro</i> <ul style="list-style-type: none">◦ Created M3ak, a security app to alert loved ones◦ App reached 10,000+ downloads with high ratings	<i>Mahdia, Tunisia</i> <i>Jan 2022 – June 2022</i>
Developer <i>Euromed Organization</i> <ul style="list-style-type: none">◦ Developed Dhayen, a mobile security app for a national campaign◦ Contributed to the Algerian national awareness campaign: 'Dhayen, Yakfi, Stop!'	<i>Paris, France</i> <i>July 2022 – Dec 2022</i>
Researcher <i>Vivieb</i> <ul style="list-style-type: none">◦ Optimized energy efficiency in Kubernetes clusters◦ Visualized metrics using Grafana, utilized KubeGreen	<i>Pescara, Italy</i> <i>Nov 2023 – Feb 2024</i>

Projects

Think Before You Save <ul style="list-style-type: none">◦ Chrome extension raising awareness about the carbon footprint of cloud storage◦ Features: File Emissions Estimation, History Tracking, Notifications, and Interactive Tips◦ Open-source project on GitHub	<i>Dec 2024</i>
Create a Serverless Kubernetes-based Resource Manager <ul style="list-style-type: none">◦ Designed a serverless Kubernetes control plane using on-premise solutions like Knative◦ Benchmarked system performance under real-world Kubernetes deployment patterns◦ Evaluating scalability and elasticity using latency, throughput, and resource usage metrics	<i>Nov 2024</i>
Comparative Evaluation of Energy Efficiency in LLMs <ul style="list-style-type: none">◦ Analyzed energy consumption across LLM versions◦ Utilized Experiment Runner and DeepEval tools	<i>Oct 2024</i>

Smart Fan Project

Sept 2024

- Controlled environmental conditions in real-time
- Used MQTT, InfluxDB, Grafana for data processing

GramApp-Detect-API

July 2024

- Developed API for grammar checking and sentiment analysis
- Leveraged NLP techniques for efficient text analysis

Vehicle Routing Problem Optimization

Dec 2023

- Solved VRPHLB using MILP for delivery optimization
- Applied network optimization techniques

Gas Monitoring System

Feb 2024

- Built a gas monitoring system using Node-RED and InfluxDB
- Integrated Telegram notifications for safety alerts

Awards

Winner – Sustainable IT Category, Green Waves Hackathon 2024

Dec 2024

- Recognized for developing 'Think Before You Save,' a Chrome extension promoting sustainable cloud storage practices.
- Event held at the Delft University of Technology campus, fostering innovation in sustainable technology.

Certifications

JNCIA-DevOps (Juniper Networks Certified Associate - DevOps)

Nov 2024

IELTS Academic - English B2

May 2023

Skills

Programming Languages: Python, Java, JavaScript, C++, Dart

Containerization and Orchestration: Kubernetes, Knative, Docker

Serverless and Cloud Technologies: Serverless architecture, AWS Lambda, Knative

Distributed Systems: Consistency, fault tolerance, performance benchmarking

Benchmarking and Performance Evaluation: Experiment Runner, DeepEval, latency, throughput analysis

Data Monitoring and Visualization: InfluxDB, Grafana, Node-RED

Optimization and Algorithms: Mixed-Integer Linear Programming (MILP), Network optimization

Natural Language Processing (NLP): Grammar checking, sentiment analysis, API development

IoT and Real-time Control: MQTT, environmental control systems, data processing

Frameworks & Libraries: Flutter, Spring Boot, Node.js

Tools & Technologies: API Development, NLP, IoT, ML frameworks

Languages

Arabic: Native

English: Fluent

French: Proficient

Italian: Proficient