

AHMAD HARKOUSS

FINAL-YEAR COMPUTER ENGINEERING
STUDENT @ EPITA | IOT & EDGE INTERN
@ VOLVO GROUP | AVAILABLE AUG 2025



CONTACTS

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Lyon

TRAINING / COURSES

Cloud, Network and Cybersecurity:

- Cybersecurity of Industrial Systems
- Pen Testing
- Industrial local networks (OPNsense)
- System and network administration
- DevSecOps, Cloud security
- Information Systems Security / DB Administration
- IaaS, infrastructure as a service (Azure, AWS)
- Crypto and BlockChain

Industrial Engineering:

- Lean Management
- Supply Chain Management
- Simultaneous Localization and Mapping (NVIDIA Isaac ROS)
- IOT objects conception
- Advanced Digital Manufacturing
- Modeling/simulation of industrial Twin Systems
- ERP information systems, micro services

Data Science

- Deep and machine Learning, MLOps
- Big Data Analytics with spark and scala, DataViz
- Combinatorial Problem Solving
- Distributed Algorithms

EXPERIENCE

Volvo Group - Digital & IT

Renault Trucks
Factory, 69200
Vénissieux, FR

IOT & Edge Computing Engineering Intern

02/2025 - 08/2025

- Worked in an **international**, cross-functional team across **France, Poland, Sweden**, and **India**, using **Agile methodologies** to contribute to Volvo's global digitalization strategy.
- **Led technical meetings with Microsoft support team** during the exploration phase of **Azure IoT Operations**, gathering insights and validating architectural design choices for industrial edge scenarios for volvo.
- Modernized an existing industrial **ThingWorx application** by designing and deploying a **cloud-native edge computing solution** using **Kubernetes** and **Dapr**, enabling secure and scalable data processing at the edge. The new solution adopts a **microservices architecture** for **cycle-based tension prediction**, with services that **publish and subscribe to MQTT messages** for real-time communication.
- Engineered & deployed **hybrid cloud connectivity** between on-premise factory systems (**OPC-UA Servers**, Factory-installed PCS) and the cloud to support secure remote monitoring and control using azure arc & iot operations.
- Designed and implemented data flows from **IOT field data** to **Azure Event Hub** for real-time industrial telemetry ingestion.
- Automated application deployment using **Helm charts, GitOps - Flux**, and **CI/CD pipelines**, ensuring consistent updates across on-prem distributed edge clusters.

ABGi France, part of Visiatiiv

52 Quai Rambaud,
69002 Lyon

Full Stack Developer

09/2023 - 01/2024

- Designed and built a full-stack Azure Cloud solution for ABGi to help clients access French R&D tax credits (CIR, CII). - Developed the backend using **Java Quarkus** and the frontend with **Angular & TypeScript**.
- Collaborated with an international team, including developers based in Serbia.

EDUCATION

EPITA: Ecole d'Ingénieurs en Informatique

Lyon, FR

Master of Computer Science Engineering In
Industry 5.0

01/2020 - 12/2025

University of Dubai

Dubai, UAE

Academic Exchange

01/2022 - 06/2022

LANGUAGES

FRENCH

Native ●●●●●

ENGLISH
Proficient (ToEIC 875)

●●●●●

ARABIC

Native ●●●●●

SPANISH
Beginner level ●●●●●