# **MONCEF BOUSSELAT**

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### **EDUCATION**

# **Master in Networking and Cloud Computing**

Sep. 2023 - Jul. 2025

University of Lorraine | Leeds Beckett University | Lulea Technical University

Nancy, FR | Leeds, UK | Skelleftea, SE

- Selected among 2000+ applicants for the Erasmus Mundus scholarship in "Green Networking and Cloud Computing"
- Relevant coursework: Cloud Services, Intelligent Systems and Robotics, Internet of Things, Advanced Wireless Networks,
  System Engineering, QoS and QoE, Data Analysis

#### Master in Data Science and Al

Sep. 2018 - Jul. 2023

National Polytechnic School

Algiers, Algeria

- Ranked in the top 10% of prepatory school students nationwide, selected through a national competitive exam
- Relevant coursework: Advanced Databases, Probability and Statistics, Multivariate Data Analysis, Machine & Deep Learning, NLP, Blockchain, Cloud Computing

### PROFESSIONAL EXPERIENCE

## Cloud Engineer – Intern

Dec. 2024 - Present

University of Lorraine

Nancy, France

- Built a decentralized Self-Sovereign Identity (SSI) system with Hyperledger Indy for secure information sharing in the cloud
- Deployed the control agents on AWS with Docker (ECS) and benchmarking of system performance

## Full-Stack Developer - Intern

Jan. 2023 – Jul. 2023

Schlumberger

Algiers, Algeria

- Developed a REST API to log 1000+ transactions/day on a Hyperledger Fabric private blockchain
- Built an app with Flask, VueJS and Docker to manage the BC and deployed it on AWS ECS, reducing penality costs by 75%

#### **PROJECTS**

# **Auto-scaling Infrastructure on AWS with Terraform**

Jan. 2025

### View on GitHub

- Designed JADE agents to simulate DDoS attacks on EC2, generating 20000+ instances per minute
- Implemented an auto-scalable infrastructure resilient to attacks via Terraform
- Developed VueJS dashboard integrating AWS SDK for CloudWatch metrics monitoring

# Fault Tolerance in Kubernetes Orchestrated Systems

Nov. 2024

# View on GitHub

- Deployed a Python app on Kubernetes cluster with an HPA for load balancing
- · Load-tested the system using cURL Achieved 99.9% uptime
- · Real-time resource monitoring with Prometheus and Grafana

### **Room Recommender Based on IoT**

Nov. 2023

### View on GitHub

- Deployed an app on AWS EC2 to collect IoT data (temperature, noise) and store it on MongoDB
- Developed a decision algorithm to recommend rooms based on user preferences

#### **AWARDS & CERTIFICATIONS**

**Certifications:** AWS Certified Solutions Architect Associate

Awards: 1st Place - Arctic Challenge (Sweden, 2024), 2nd Place - Google DevFest Hackathon 21 (Algeria, 2021)

### **SKILLS**

Programming Languages: Python, C/C++, Java, PHP/SQL, JavaScript/TypeScript, BASH

**Tools and Technologies**: AWS (certified), Terraform, Docker, Kubernetes, Git, CI/CD, Monitoring (Prometheus, Grafana)

Languages: English (C2), French (C2), Arabic (Native), Swedish (Basic)