



ISMAIL LAHBARI *Software Engineer | DevOps/ Cloud Specialist*

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EDUCATION

Software Engineering Program, ALX/Holberton school
03/2023 – 04/2024 | Casablanca, Morocco
Completed in partnership with Holberton School.

Master's degree in Software Engineering, FST SETTAT
2015 – 2017 | Settati, Morocco

Bachelor's degree in computer engineering, Hassan II Ain chock University
2011 – 2014 | Casablanca, Morocco

High School Diploma in Science math, Othman ibn affan high school
2010 – 2011 | Casablanca, Morocco

SKILLS

OS: Linux/UNIX, Ubuntu , Windows, macOS

Software development tools: Git, GitHub, NPN/Yarn, Slack, Discord, IDE (VS, VS code, PyCharm, Dev Tools, Jest Unit Testing.), Vim and Emacs)

Testing & QA Tools: Robot Framework, Jenkins, Postman, Cypress, Selenium, Pytest, Unit Testing (Python, JavaScript), API Testing, Functional & Regression Testing, CI/CD QA Pipelines

Project management: Agile/Scrum methodologies, Teams, Notion, JIRA, Trello

Testing & Quality & Debugging: Pytest (Python), Jest (JavaScript), Unit testing, Selenium, Jest, Cypress, Postman for API testing

AI & ML: GenAI, LLMs, AI Tools, Prompting IA

Knowledge of Oracle databases, Apache Cassandra, PostgreSQL, MS-SQL and Exchange, SharePoint applications

Strong understanding of social media platforms and analytics

System Integration (APIs, Microservices, Web services)

Web Scraping & Automation
BeautifulSoup, Selenium, Scrapy, Requests, API-auth (NextAuth.js)

Programming: HTML5/CSS3, JavaScript, SQL, Python, TypeScript, Java, C/C++, OOP, SASS, PowerShell, RESTful API, GraphQL, VB, CNC

Database: Advanced SQL & Data Optimization/MongoDB/MySQL/PostgreSQL, Redis, RabbitMQ, Kafka, Oracle, Apache Cassandra, MS-SQL, ChromaDB

WordPress Development (Themes, Plugins, Customization)

DevOps & Cloud: Docker, Kubernetes, Cloud Services (AWS, Azure), Azure (App Services, AKS, Blob Storage, DevOps), CI/CD (Jenkins, GitHub Actions), Terraform, Ansible, Jenkins

Administrative tools: Active Directory, PowerShell, Bash

Data Visualization, Data Analysis (data management)

Network monitoring (Ethernet, Wan and Wifi), security (Proxy, antivirus, firewall).

Orchestration & Automation (Scripting, Bash, PowerShell, Python automation, Ansible, Terraform, OpenStack)

Network Management, Systems Admin, Helpdesk Supervision, Cloud Infrastructure

Monitoring & Logging
Prometheus, Grafana, ELK Stack

PROFILE

DevOps/CloudOps & Full-Stack Software Engineer with hands-on expertise in building secure, scalable, and automated infrastructures across Azure and AWS. Passionate about driving CI/CD, infrastructure as code, and system reliability. Experienced in DevSecOps, microservices, and AI-integrated systems. Seeking to contribute to high-impact, cloud-native environments that value innovation and resilience.

LANGUAGES

English ● ● ● ● ●

French ● ● ● ● ●

Arabic ● ● ● ● ●

WORK EXPERIENCE

Full Stack & DevOps Engineer, Valhko

10/2024 – present | London Area, United Kingdom

■ Key Contributions:

- Led full-stack development across ARYA, an AI career platform serving (1,000+ users), offering chatbot guidance, resume feedback, job boards, personalized learning pathways and tools for job applications and upskilling.
- Engineered ARYA's Key Modules:
 - V1: Integrated chatbot and career profile.
 - V2: Developed an agentic workspace with DeepSearch, CompanySearch, InterviewSim, and analytics dashboards.
 - V3: Created job boards, AI-curated feeds, and learning pathways.
 - V4: Designed scalable microservices for AI marketplace, user feeds, post-sharing, chat, and notifications.

Architected and implemented a modular microservices ecosystem—AI agent marketplace, user feeds, notifications, analytics—using Django, FastAPI, PostgreSQL, and ChromaDB.

- Built responsive, TypeScript-first UI in Next.js/React with Tailwind CSS, D3.js dashboards, drag-and-drop workflows, and real-time updates.
- Integrated GPT-powered LLMs and RAG pipelines for job-fit scoring, resume parsing, and skill-gap detection.
- Engineered subscription & referral system with Stripe, PayPal, and Payscale—automating discount codes, token usage tracking, and secure checkout flows.
- Containerized services using Docker, enabling consistent local development, seamless deployment, and microservice isolation.
- Cloud & DevOps: Deployed on Azure using App Services and AKS; automated infrastructure with Terraform and CI/CD pipelines (GitHub Actions, Azure DevOps)
- Enforced DevSecOps best practices: vulnerability scanning, access controls, GDPR-compliant data handling, and Azure Security Center integration.
- Enhanced observability and reliability using Azure Monitor, Application Insights, and centralized logging—achieving 99.9% uptime.

Devops & Software Engineer, L&H Computer

12/2022 – 11/2024 | Casablanca, Morocco

- Architected and developed full-stack web applications using React (frontend), FastAPI and Django (backend APIs), and PostgreSQL, delivering three scalable products on schedule.
- Engineered robust CI/CD pipelines with GitLab CI, Docker, and Kubernetes, accelerating deployment speed by 70% and enabling zero-downtime releases.
- Automated cloud infrastructure provisioning on Azure and AWS using Terraform and ARM templates, reducing manual configuration errors by 80%.
- Managed container orchestration with Helm charts and Kubernetes to ensure high availability and auto-scaling of production workloads.
- Implemented monitoring and alerting solutions using Prometheus, Grafana, and Azure Monitor to proactively maintain system health.
- Collaborated with product owners and QA teams to define requirements, perform code reviews, and mentor two junior engineers, boosting team velocity and code quality.

IT Software Engineer & DevOps, Dell Technologies

11/2020 – 11/2022 | Casablanca, Morocco

- Developed software using C, Python, and Linux, automating tasks with Bash/Shell scripting.
- Built and managed CI/CD pipelines with Jenkins, GitLab CI, and Git for efficient deployments.
- Automated cloud infrastructure on Azure and AWS using Terraform and ARM templates.
- Managed container orchestration with Kubernetes and Helm for high availability and scalability.
- Implemented monitoring with Prometheus, Grafana, and Azure Monitor to ensure system health.
- Performed debugging and root cause analysis using GDB and log analysis.
- Worked in Agile/Scrum teams, conducting code reviews and following SDLC best practices.

Key Skills: C, Python, Linux, Bash, DevOps, CI/CD, Jenkins, GitLab CI, Git, Terraform, ARM Templates, Azure, AWS, Kubernetes, Helm, Prometheus, Grafana, Agile, SDLC.

Pre-Employment Internship, Dell Technologies

08/2020 – 11/2020 | Casablanca, Morocco

- Assisted in developing and testing software modules using C, Python, and Linux environments, gaining hands-on experience with system-level programming.
- Supported the automation of deployment and configuration tasks through Bash/Shell scripting and contributed to maintaining CI/CD pipelines.

PROJECTS

ARYA Platform

10/2024 – present

- Architected and developed ARYA's full-stack application (Next.js, Django, FastAPI).
- Deployed microservices on Azure AKS with Terraform and Ansible.
- Integrated LLM-based services with scalable infrastructure.
- Built CI/CD workflows and enforced DevSecOps policies across services.

Portfolio website,

Developed with Next.js 14 & Deployed on Vercel

03/2024 – 04/2024

- Created a modern, responsive portfolio website using Next.js 14 showcasing personal and professional projects
- Features include interactive chatbot, detailed project sections, and SEO optimization
- Enhanced user engagement by 25% through interactive features
- Deployed on Vercel for optimized performance and seamless hosting, the website demonstrates expertise in full-stack development and front-end design.

Simple POS Microservices System, Node.js |

Express.js | MongoDB | RabbitMQ | Docker |

Microservices Architecture

04/2025 – 04/2025

- Built a simplified Point of Sale (POS) system using a microservices architecture.
- Developed two services:
- Implemented asynchronous messaging with RabbitMQ for service-to-service communication.
- Containerized the full system using Docker and orchestrated with Docker Compose.
- Designed REST APIs for creating and fetching orders and inventory data.
- Ensured scalability and decoupling between services, following real-world backend engineering practices.
- Tools & Technologies: Node.js, Express.js, MongoDB, Mongoose, RabbitMQ (amqp), Docker, Docker-Compose, Postman.

AirBnB Clone Project, Built with Python, Flask, and SQLAlchemy | Deployed with Fabric and CI/CD

07/2023 – 04/2024

- Developed a full-stack AirBnB clone, handling front-end, back-end, and database integration.
- Built the backend and command interpreter with Python, enabling core data operations.
- Designed responsive static pages using HTML and CSS.
- Integrated MySQL for data management with SQLAlchemy ORM.
- Created a dynamic web interface using Flask, RESTful API, and JavaScript (jQuery).
- Deployed the application across multiple servers using Fabric and CI/CD methodologies.

Presence Management Application with RFID Integration

01/2016 – 04/2016

Overview: This project focuses on developing a Presence Management System that integrates RFID technology for attendance tracking. The system automates personnel monitoring by using an RFID reader and identity cards to register user entries and exits.

- Frontend: Vue.js for dynamic and responsive UI.

- Participated in debugging and troubleshooting software issues using tools like GDB and log analysis, improving problem-solving skills.
- Collaborated with cross-functional Agile teams, engaging in code reviews, requirement analysis, and documentation.
- Gained familiarity with software development lifecycle (SDLC), version control (Git), and software quality assurance processes.
- Developed communication and teamwork skills by working closely with senior engineers and project stakeholders.

Key Skills: C Programming, Linux, Python, Bash/Shell Scripting, Debugging, CI/CD, Agile, Git, SDLC, Software Testing.

IT Engineer, Mup Maroc

09/2017 – 07/2020 | Mohammedia, Morocco

As an IT Engineer at MUP Maroc, I was responsible for designing, implementing, and managing the company's IT infrastructure to ensure its performance, security, and availability. My main tasks included:

- Installation, configuration, and maintenance of IT systems, servers, workstations, and network equipment tailored to the industrial needs of MUP Maroc.
- Continuous monitoring of network and server performance to ensure optimal connectivity and minimize interruptions.
- Implementation of IT security protocols, including the management of firewalls, antivirus software, and other solutions to protect against unauthorized access.
- Rapid diagnosis and resolution of technical incidents related to hardware, software, or networks to ensure business continuity.
- Regular backup of critical data and implementation of recovery procedures in case of incidents.
- Collaboration with technical and operational teams to integrate new technologies and optimize existing systems.
- Accurate documentation of configurations, procedures, and interventions to facilitate the management and maintenance of IT infrastructure.

This experience allowed me to develop solid expertise in IT systems management within an industrial environment, with a focus on the security, reliability, and efficiency of technological infrastructures.

Graduate Project – Software Engineering Intern, OCP Group

03/2017 – 07/2017 | El-Jadida, Morocco

As part of my Master's degree in Software Engineering, I completed a graduate project at OCP Group focused on developing a full-stack web application to optimize maintenance operations across industrial sites. The solution aimed to digitize work order tracking and enhance operational efficiency.

Key Contributions:

- Built a responsive front-end using React, Next.js, and TypeScript, following OCP's UI/UX standards.
- Developed a robust backend with Django (Python) to handle business logic and API endpoints.
- Designed and managed the database architecture using MySQL, ensuring data consistency and scalability.
- Deployed the application on AWS using EC2 and RDS services, ensuring high availability and secure access.
- Collaborated with engineering teams to gather requirements, test features, and iterate based on user feedback.

Technologies Used: React, Next.js, TypeScript, Django (Python), MySQL, AWS (EC2, RDS)

Graduate Project – IT Systems & Network Engineering Intern, OCP Group

04/2015 – 06/2015 | El-Jadida, Morocco

As part of a team of engineering interns for our Bachelor's degree in Computer Engineering, we collaboratively led a critical infrastructure upgrade project at L&H Computer. The objective was to modernize the company's IT systems and enhance network performance and security across departments.

Project Focus: Group project focused on the full redesign and deployment of a secure, scalable IT infrastructure—supporting over 100 endpoints—with improvements to server environments, internal tools, and support systems.

Key Contributions & Achievements:

- Collaborated in designing and deploying a secure LAN/WAN network using Cisco routers and switches, leading to a 40% reduction in latency.
- Participated in the migration to Windows Server 2019 with Active Directory integration, improving centralized access and user management.
- Co-developed and scripted automated backup and software deployment tasks using PowerShell, increasing IT team efficiency.
- Built an internal ticketing system using PHP and MySQL with the team, cutting down IT support resolution time by 50%.
- Contributed to a full-scale network security audit, including firewall configuration and antivirus deployment to ensure compliance and reliability.

Technologies Used: Cisco IOS, Windows Server 2019, PowerShell, PHP, MySQL, VMware, Wireshark, Ubiquiti

- Backend: Node.js (Express) for API and data processing.
- Database: PostgreSQL for efficient data storage and management.
- Hardware: RFID reader and cards for automated attendance tracking.
- Deployment: Dockerized app hosted on Azure/AWS for scalability.
- Security: JWT Authentication for secure access control.

Simple shell

05/2023 – 06/2023

I single-handedly developed a lightweight and user-friendly Unix-like shell designed to provide a simple and efficient command-line interface. As the overall project manager, I handled the design, implementation, and testing from scratch. The main goal was to create a functional shell capable of executing basic commands, handling input/output redirection, and supporting custom internal features.

- Designed a command parser to interpret and execute user input.
- Supported I/O (input/output) redirection to a file.
- Implemented simple and useful internal commands.
- Handled errors with explicit messages for a better user experience.
- Complied with POSIX standards to ensure cross-platform portability.

Technologies: C, Git, Linux, VS Code

CERTIFICATES

- Microsoft Certified: Azure Fundamentals (in progress)
- AWS Certified Solutions Architect (in progress)
- Programming Hub Certifications (Python, HTML/CSS/JS, Next JS, Express JS, Node JS, Typescript, React Development, DevOps, SQL, SEO, Cloud Computing, UI/UX, IOT)
- Cisco Certified Network Associate (CCNA)
- ALX AiCE - AI Career Essentials
- Sales force S001

INTERESTS

- Hobbies: Football, bodybuilding, reading, travel, programming, tech trends, online gaming
- Soft Skills: Problem-Solving & Critical Thinking, Project Management (Agile methodologies, Jira), collaboration and teamwork, time management, adaptability, leadership, customer service, analytical thinking, innovation and creativity

AWARDS

Fundamentals of Generative AI Badge, Microsoft 13/07/2024

Acquired deep understanding of generative AI, including language models, prompting, and copilots.