

# Iheb Belhadj

|iheb.belhadj.dev@gmail.com | +216 95 611 874

ihebbelhadj.vercel.app | linkedin.com/in/iheb-belhaj | github.com/IhebBelhadj

## Summary

Software engineer specializing in backend systems and DevOps practices. Experienced in building scalable software, designing and automating CI/CD pipelines, managing cloud infrastructure, and ensuring reliable, reproducible deployments.

## Technologies

**Languages:** TypeScript, Python, JavaScript, Java, C#, C, SQL, PHP, Bash, Groovy, Lua

**Web/Fullstack:** Next.js, React, Astro.js, Angular, Vue.js, Express.js, Spring, Flask, FastAPI

**Infrastructure & DevOps:** Docker, Kubernetes, Ansible, Vagrant, Jenkins, GitHub Actions, AWS

**Databases:** PostgreSQL, MySQL, MongoDB, Redis, MinIO, AWS RDS, S3

**Data Eng & AI:** Airflow, Airbyte, dbt, Kafka, Spark, LangChain, LangGraph, MLflow

## Experience

**Software Engineering Intern**, Talan – Tunis, TN

Feb 2025 – Aug 2025

- Integrated a multi-agent system with LangGraph for dynamic SQL and chart generation, enabling no-code data exploration.
- Built and deployed an end-to-end data pipeline with Airflow and dbt on Dockerized infrastructure, ensuring reproducible workflows and enabling easy scaling of replicas under load.
- Automated deployments via GitHub webhooks and Bash scripts on a Docker Compose cluster, improving release consistency.
- Secured the platform with Keycloak IAM using role- and group-based access control , and built an Nginx gateway to secure the private services network.
  - Technologies used: Python, FastAPI, Next.js, LangGraph, LangChain, MLflow, MinIO, Airflow, Airbyte, dbt, PostgreSQL, Keycloak, Docker, Nginx

**Freelance Job**, Nexits – Paris, FR

Dec 2024 - Jan 2025

- Architected a CMS solution with Payload CMS and a custom block-based page builder, integrating it into the existing Nexits Turborepo monorepo and GitHub CI/CD pipeline, enabling no-code content updates for the landing site.
- Built an instantaneous preview system using Astro.js for dynamic component rendering with minimal JS.
- Designed a dual rendering strategy (SSR for preview, SSG for production), achieving 100 performance, 95 accessibility, and 100 SEO score on Lighthouse.
  - Technologies used: Astro.js, Payload CMS, Next.js, React, TypeScript, SQLite, Turborepo

**Software engineer**, Nexits – Paris, FR

Aug 2023 - Sep 2024

- Contributed to GitHub Actions CI/CD pipelines for the Turborepo monorepo, orchestrating builds, tests, and deployments across multiple services, enabling faster consistent environment delivery for the entire team.
- Contributed to migration from legacy stack to Next.js, tRPC, and Turborepo monorepo with AWS deployment.
  - Technologies used: Next.js, React, TypeScript, Node.js, tRPC, PostgreSQL, AWS (EC2, ECR, S3, RDS), Docker, GitHub Actions, Turborepo

**Freelance instructor (Weekends)**, ENET'Com Junior Entreprise – Sfax, TN

Oct 2023 - Nov 2023

- Conducted workshops on the MERN stack teaching more than 30 junior club members.

**Software Engineering Intern**, Nexits – Paris, FR

June 2023 - Aug 2023

## Projects

- **OpsForge:** A self-contained local DevOps environment simulating production using Vagrant and Ansible. Includes a private Docker registry, Jenkins CI/CD, monitoring stack with Prometheus/Grafana, and SonarQube.
  - Technologies used: Ansible, Vagrant, Docker, Jenkins, Prometheus, Grafana, SonarQube, Bash
- **Playpex:** Torrent streamer in Node.js with backend wrapper using MSE API for seamless browser playback. Angular frontend, Electron desktop app to bundle the engine and the frontend, and Ionic mobile app controller.
- **Portfolio:** Built on Next.js with MDX-based content management, lazy loading, and server components. Set up a GitHub Actions CI pipeline for linting, type checking, and automated deployment to Vercel. Achieved 100 performance and best practices scores on Lighthouse.
  - Technologies used: Next.js, LangChain, Vercel, GitHub Actions, TypeScript, MDX
- **EldSync:** Contributed to building a Java microservices application with Spring Boot, Spring Security, and an API Gateway, integrating Angular with Apollo Client and NgRx for state management.

## Education

**Software engineering**, ESPRIT

Sept 2022 – Sep 2025

**Pre-engineering school**, IPEIM

Sept 2020 – Juin 2022