

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, data pipelines, and agentic AI. Experienced in building cloud-native applications, multi-agent systems, and scalable infrastructure for data-driven solutions.

Technologies

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

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

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

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

Infrastructure: Docker, Kubernetes, Terraform, Ansible, Vagrant, Jenkins, GitHub Actions, AWS

Experience

Software Engineering Intern, Talan – Tunis, TN

- Integrated a multi-agent system with LangGraph for dynamic SQL and chart generation, enabling no-code data exploration.
- Built a real-time CDC pipeline refreshing charts live, enabling instant monitoring.
- Developed an end-to-end data pipeline with MinIO, Delta Lake, Airflow, and dbt to manage ingestion, transformation, and ML forecasting.
- Secured the platform with Keycloak IAM using role- and group-based access control.
 - Technologies used: Python, FastAPI, Next.js, LangGraph, LangChain, MLflow, MinIO, Delta Lake, Airflow, dbt, PostgreSQL, Keycloak, Docker, Nginx

Freelance Software Engineer, Nexits – Paris, FR

- Architected a CMS solution with Payload CMS and a custom block-based page builder, 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, React, TypeScript, Vercel, SQLite, Turborepo

Software Engineer, Nexits – Paris, FR

- Implemented product state historization with audit trail, enabling edits, rollbacks, and time-travel of product data.
- 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, ENET'Com Junior Entreprise – Sfax, TN

- Delivered weekend workshops on MERN stack (MongoDB, Express.js, React, Node.js) for 30+ student club members.

Software Engineering Intern, Nexits – Paris, FR

Projects

- **Portfolio:** Built on Next.js with MDX-based content management, lazy loading, and server components. Integrated a LangChain agent that answers questions about my experience. Achieved 100 performance and best practices scores on Lighthouse.
 - Technologies used: Next.js, LangChain, Vercel
- **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, and Ionic mobile controller.

– Technologies used: Node.js, Angular, Ionic, Electron

Education

Master in Software Engineering, ESPRIT

Bachelor in Applied Math and Physics, IPEIM