Iheb Belhadj

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Technologies

Languages: JavaScript, Typescript, Python, C
, C, SQL, Java, PHP, Bash

Fullstack dev Spring, Express.js, Flask, FastAPI, React, Next.js, Astro.js, Angular, Vue.js

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

Data eng: Airflow, Airbyte, dbt, Kafka, Spark

Agentic AI frameworks: LangChain, LangGraph, CrewAI, AutoGen

Cloud: AWS (EC2, S3, RDS, Lambda), GCP (Compute Engine, Cloud Storage, Cloud SQL)

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

Experience

Software Engineering Intern, Talan – Tunis,TN — Feb 2025 – Aug 2025

- Designed and implemented an AI-first analytics platform enabling business users to explore and analyze data through natural language queries.
- Integrated a multi-agent system with LangGraph, dynamically generating SQL queries and visualizations, with support for RAG pipelines and MCP integrations.
- Built a real-time change data capture (CDC) system, automatically refreshing charts when source data changed, improving analytics freshness.
- Developed an end-to-end data pipeline with MinIO, Delta Lake, Airflow, and dbt to streamline ingestion, transformation, and storage, while orchestrating ML forecasting jobs.
- Secured the platform using Keycloak IAM, implementing role- and group-based fine-grained access control.
  - Technologies used: Python, FastAPI, Next.js, LangGraph, LangChain, MLflow, MinIO, Delta Lake, Airflow, dbt, PostgreSQL, Keycloak, Docker, Nginx

Freelance Job, Nexits – Paris, FR — Dec 2024 - Feb 2025

- Architected and developed CMS solution, leveraging Payload CMS and a custom-built, block-based page builder enabling nexits team to create new pages and edit content Nexits landing website with no code
- Instantaneous Preview system that dynamically build components from declarative config from the CMS using Astro.js for minimal JS on build
- Dual rendering strategy with SSR for preview mode and SSG for production build achieving 100 performance score on Google Lighthouse 95 accessibility and 100 seo score on production landing website using this architecture
  - Technologies used: Astro.js, Payload CMS, React, TypeScript, Vercel, SQLite, Turborepo

Software engineer, Nexits – Paris, FR — Aug 2023 - Sep 2024

- Implemented product state historization with full audit trail, enabling edits, rollbacks, and time-travel of product data.
- Contributed to the migration from a legacy system to a modern stack using Next.js, tRPC, and a monorepo architecture with Turborepo as well as its deployment on AWS.
  - Technologies used: Next.js, React, TypeScript, Node.js, tRPC, PostgreSQL, AWS (EC2, S3, RDS), Docker, GitHub Actions, Turborepo

Freelance instructor, ENET'Com Junior Entreprise – Sfax, TN — Oct 2023 - Nov 2023

- Conducted workshops over the weekends on web development using the MERN stack (MongoDB, Express.js, React, Node.js) teaching more than 30 junior club members.

Software Engineering Intern, Nexits – Paris, FR — June 2023 - Aug 2023

Projects

Playpex — github.com/name/repo

- Built a streaming torrent client in Node.js with a backend wrapper leveraging Media Source Extensions API for seamless

browser playback.

- Designed a TV-like Angular interface optimized for remote and keyboard navigation, delivering a living-room experience.
- Bundled torrent streaming backend and services into a unified Electron application for cross-platform desktop use.
- Developed a companion Ionic mobile controller app, enabling real-time playback control via WebSockets.
  - Technologies used: Node.js, Angular, Ionic, Electron

Education

Masters in software engineering, ESPRIT   Sept 2022 – Sep 2025
Bachelor in applied math and physics, IPEIM   Sept 2020 – Juin 2022