Louai **ALOUI**

SOFTWARE ENGINEER

Ariana essoughra, 2081, Ariana, Tunis

☐ (+216) 53-317-696 | ✉ louaialoui1993@gmail.com | ⬚ alouilouai | ⬚ louai-aloui-521094111

"Be the change that you want to see in the world."

Skills

Programming Languages: JavaScript, TypeScript, Python

Frameworks: Express, Nest js, Strapi, Gatsby, Next.js, Flask, React-Redux

Data Management: PostgreSQL, MySQL, QuestDB, SQLite3, MariaDB, MongoDB, DynamoDB, SQLAlchemy, Prisma, TypeORM, Sequelize

Cloud & DevOps: AWS (EC2, S3, SES), Wasabi, Docker, Docker Swarm, Kubernetes, CI/CD Pipelines, bash

Libraries & Tools: React, Redux, jQuery, Bootstrap

Languages: English (B2 Level), French (B2 Level), Arabic (Native)

Work Experience

Quantech Solution Partners
Nice (Remote)

FULL-STACK ENGINEER
Jan. 2024 - Dec. 2024

- Transitioned to full-stack engineering, automating workflows for financial data (DataScope, OPRA) with Python scripting, reducing manual effort by 30 %.
- Led migration from QuestDB to PostgreSQL, improving query performance by 40% and ensuring data integrity across a scalable architecture.
- Replaced REST APIs with GraphQL, enabling flexible and efficient data queries and reducing average response times by 25%.
- Configured AWS EC2 instances for seamless Next.js, Python, and GitHub Actions integration, reducing deployment times by 50% with optimized CI/CD pipelines.
- Integrated Confluence with Microsoft Teams, increasing team collaboration efficiency by 20% through streamlined knowledge sharing.
- Implemented push-to-talk functionality using Zello, enhancing real-time communication across global teams, reducing response delays by 50%.
- Deployed and configured Mattermost in Docker, improving task management processes and boosting team coordination by 15%.

FRONTEND ENGINEER

- Designed and implemented interactive data visualizations, boosting user engagement metrics by 30% for dynamic web applications.
- Developed a modular frontend architecture with Next.js 14 (App Router) and Redux Toolkit, centralizing state management and enhancing performance.
- Integrated NextAuth for secure authentication, reducing onboarding issues by 20% while maintaining compliance with modern security standards.
- Built customizable UI widgets with dynamic resizing and positioning, improving dashboard personalization options for users.
- Authored reusable React hooks to abstract complex logic, enhancing code quality and reducing redundancy across components by 25%.
- Collaborated with backend teams to deliver cohesive user experiences, aligning frontend with APIs to meet 100% of project deadlines.

Digital Rogue Wave
Montplaisir, Tunis

BACKEND ENGINEER
Dec. 2022 - Sep. 2023

- Developed a SaaS referral system using NestJS and Apache Kafka, enabling seamless event-driven communication and handling 1M+ events monthly.
- Designed and implemented microservices for email notifications, reward redemptions, and referral tracking, following Domain-Driven Design (DDD) principles to ensure scalability.
- Dockerized services including PostgreSQL, Redis, and Prometheus, and migrated the database to CockroachDB, boosting system performance by 35%.
- Optimized an open-source Zookeeper cluster to improve Apache Kafka coordination, reducing event-processing latency by 25%.
- Collaborated with frontend developers to integrate Next.js 13 (Page Router) with backend APIs, ensuring timely feature delivery and seamless user experiences.
- Built CI/CD pipelines to automate build, test, and deployment processes, decreasing deployment time by 40% on AWS EC2 instances.
- Achieved 90% code coverage through unit testing with Jest and integration testing with Cypress, ensuring reliability and minimizing bugs in production.
- Set up real-time monitoring with Prometheus, Loki, and Grafana, reducing mean time to resolution (MTTR) by 30% for production issues.
- Partnered with cross-functional teams to deliver features from ideation to deployment, improving overall system scalability and user satisfaction.

Wagmi Tech UG
Berlin (Remote)

SOFTWARE ENGINEER (FREELANCE)   *Apr. 2022 - Oct. 2022*

- Contributed to the development of an NFT marketplace leveraging Hedera Hashgraph, ensuring secure and efficient decentralized transactions.
- Implemented Apollo Server and client, reducing query response times by 25% and enabling seamless data fetching between frontend and backend.
- Integrated Algolia for advanced search capabilities, improving search speed by 40% and supporting complex queries for marketplace data.
- Migrated from serverless MongoDB to a MongoDB cluster, enhancing database scalability and enabling real-time updates through database listeners.
- Collaborated on smart contract development and integrated Web3.0 technologies, strengthening expertise in blockchain and distributed ledger ecosystems.
- Utilized technologies like Express, MongoDB, Gatsby, TailwindCSS, Docker, Kubernetes, Prisma, and GraphQL to design and build a scalable, high-performance system.

Bulldozer
Quebec (Remote)

SOFTWARE ENGINEER GRADUATION INTERNSHIP   *Jul. 2021 - Jan. 2022*

- Led backend development by integrating headless CMS technology, reducing development time by 30% and improving scalability for content management.
- Built fully automated CI/CD pipelines on CircleCI for containerized applications, increasing deployment efficiency by 40% and ensuring consistent production rollouts with Docker and AWS.
- Designed and delivered a responsive, dynamic Next.js frontend, enhancing user engagement and achieving cross-device compatibility.
- Developed and deployed scalable APIs using Strapi, Node.js, Koa, and AWS Lambda serverless functions, optimizing application performance and reducing server costs.
- Optimized database operations using SQLite3 for testing and MariaDB for production, leveraging Bookshelf.js and Knex for efficient ORM and query building.

Education _____

ESPRIT - Honoris-United-Universities
Ghazela, Ariana, Tunis

ENGINEERING DEGREE IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING   *Sep 2016 - Jan. 2022*

- Participated in the university's website updates twice, contributing to the site's maintenance and enhancement.