

# Louai ALOUI

SOFTWARE ENGINEER

Ariana essoughra, 2081, Ariana, Tunis

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“Be the change that you want to see in the world.”

## Skills

**Programming Languages:** JavaScript, TypeScript, Python, Java

**Frameworks:** Express, Nest.js, Strapi, Gatsby, Next.js, Flask, Spring Boot, 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 from Frontend Engineer to Full-stack Engineer, leveraging Python scripting to enhance market data workflows in the finance sector, focusing on DataScope and OPRA.
- Managed the deployment and migration of PostgreSQL databases, ensuring smooth data operations and integrations.
- Developed and implemented a Flask application to handle GraphQL queries, streamlining data access and presentation.
- Led the migration from QuestDB to PostgreSQL, optimizing database performance and reliability.
- Configured EC2 instances for seamless integration with Next.js, Python, and GitHub runners to streamline CI/CD pipelines and ensure efficient deployment across various environments.
- Worked with Kubernetes for container orchestration, improving scalability and deployment efficiency.
- Integrated Confluence with Microsoft Teams, enhancing collaboration across teams.
- Implemented push-to-talk functionality using Zello, facilitating seamless communication across different regions.
- Deployed Mattermost Docker image for task management, improving team coordination and workflow.

FRONTEND ENGINEER

- Designed and developed customizable widgets and interactive charts for a dynamic web app, improving user experience and data visualization.
- Utilized Next.js and Redux to build a highly scalable frontend architecture.
- Responsible for maintaining and optimizing CI/CD pipelines, ensuring smooth deployment to staging and production environments.
- Configured EC2 instances and integrated them with GitHub runners to automate builds, deployments, and tests.
- Worked with Kubernetes for managing and scaling containerized applications.

### Digital Rogue Wave

Montplaisir, Tunis

BACKEND ENGINEER

Dec. 2022 - Sep. 2023

- Designed and implemented microservices architecture, including email functionality and real-time statistics generation using Kafka for scalable messaging.
- Managed a successful database migration from PostgreSQL to CockroachDB, ensuring seamless database connections and Dockerizing processes for enhanced environment consistency.
- Developed new features in line with Domain-Driven Design (DDD) principles, ensuring clear architecture and maintainable code.
- Conducted unit testing with Jest and integration testing with Cypress.io to ensure code quality and feature reliability.
- Implemented robust monitoring solutions using Loki and Grafana, improving application observability and streamlining issue resolution.

### Wagmi Tech UG

Berlin (Remote)

SOFTWARE ENGINEER

Apr. 2022 - Oct. 2022

- Contributed to the development of an NFT marketplace built on the Distributed Ledger Technology (Hedera Hashgraph), utilizing innovative blockchain solutions.
- Implemented Apollo Server and client, optimizing data fetching to ensure smooth interaction with backend servers and improve performance.
- Gained hands-on experience with smart contracts and Web3.0 technologies, contributing to the growing blockchain ecosystem.
- Integrated Algolia for advanced search functionalities, enhancing speed and complexity in data retrieval for the marketplace.
- Led the migration from serverless MongoDB to a MongoDB cluster, enabling the use of database listeners and enhancing database performance and scalability.
- Utilized technologies such as Express, MongoDB, Gatsby, TailwindCSS, Docker, Kubernetes, Prisma, GraphQL, and TypeGraphQL to build a scalable and efficient system.

## Bulldozer

Quebec (Remote)

SOFTWARE ENGINEER

Jul. 2021 - Jan. 2022

- Led backend development, implementing headless CMS technology to streamline development time and enhance scalability.
- Built and maintained fully automated CI/CD pipelines on CircleCI for containerized applications using Docker and AWS, improving deployment efficiency.
- Designed and developed the Next.js frontend, delivering a responsive and dynamic user interface.
- Implemented several APIs using Strapi, Node.js, Koa, and AWS Lambda serverless functions to enhance application functionality and scalability.
- Worked with databases such as SQLite3 for testing and MariaDB for production, utilizing Bookshelf.js and Knex for ORM and query building.

## Education

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### 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.