

Nessal Zakaria Rachid

Full-Stack Developer | Passionate about Scalable Web Solutions

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PROFILE

Versatile Full-Stack Developer and final-year Computer Science student at ESI-SBA, passionate about building scalable, high-performance web applications. Skilled in Next.js, NestJS, and Express, with a strong foundation in API design, cloud deployment, and modern DevOps practices. Known for architecting clean, maintainable systems from scratch and integrating emerging technologies—including AI—to solve real-world problems. Proactive, fast learner, and deeply committed to continuous improvement and impactful development.

EDUCATION

École Supérieure d'Informatique (ESI-SBA), Sidi Bel Abbès Sept 2021 – Present
Engineering Degree in Computer Systems
Relevant Coursework: Software Architecture, Distributed Systems, Web Technologies, Data Structures

TECHNICAL SKILLS

- **Frameworks & Core Expertise:** NestJS (modular architecture, secure API design, microservices), Next.js (SSR/SSG, SEO optimization, performance-driven front-end).
- **Languages & Web Technologies:** TypeScript, JavaScript (ES6+), HTML5, CSS3, Tailwind CSS.
- **Back-End Development:** Node.js, Express.js; expertise in REST/GraphQL APIs, JWT authentication, and scalable server-side architectures.
- **Front-End Development:** React.js; responsive UI development, state management, and performance optimization.
- **Databases & ORMs:** PostgreSQL, MongoDB; proficient with Prisma, TypeORM, and Sequelize for data modeling and queries.
- **DevOps & Cloud:** Git/GitHub, CI/CD pipelines (GitHub Actions), Docker, deployments on Vercel, Google Cloud Platform (GCP), and Netlify.
- **Testing & Optimization:** Test-Driven Development (Jest, Cypress), caching strategies, and Lighthouse performance audits.
- **Collaboration & Tools:** Figma (UI/UX design collaboration), Postman (API testing & documentation), Agile/SCRUM methodologies.

EXPERIENCE

Back-End Developer, Incubator Management Platform Feb 2025 – Jun 2025

- Developed a secure and scalable REST API using NestJS and PostgreSQL to manage incubators, user roles, and project lifecycles.
- Implemented role-based access control, project status tracking, and efficient database schema design.
- Collaborated with the front-end team (React.js) and ensured smooth deployment via CI/CD pipelines.

Full-Stack Developer, Unitary – London, UK

Aug 2024 – Jan 2025

- Built and maintained full-stack features for an AI-driven content moderation platform, using Next.js for the frontend and NestJS for the backend.
- Designed RESTful APIs, optimized PostgreSQL queries, and implemented caching strategies to enhance system scalability.
- Delivered responsive dashboards for clients and internal teams, improving user experience and reporting efficiency.
- Collaborated on Docker-based deployments and CI/CD workflows, ensuring smooth releases on AWS infrastructure.

Back-End Developer, University Project – Overtime Hours API

Jan 2024 – May 2024

- Developed a REST API with Express.js to manage employee overtime records.
- Designed relational database schema and secured endpoints with JWT-based authentication.
- Implemented unit tests with Jest and collaborated in an agile, Git-based workflow.

Full-Stack Developer, Personal Projects – Sidi Bel Abbès

Dec 2021 – Present

- Designed and deployed full-stack applications using Next.js, NestJS, and Express.js.
- Built secure REST APIs with MongoDB/PostgreSQL backends for scalable data management.
- Established CI/CD pipelines and deployed projects on Vercel, GCP, and Netlify.

PROJECTS

Incubator Management Platform

- Full-stack web platform to manage startup incubators, project lifecycles, and user roles.
- Engineered a secure **NestJS + PostgreSQL** backend with role-based access control and audit logging.
- Delivered a responsive **React.js** frontend and automated deployment via **CI/CD pipelines** on **Vercel**.

Real-Time Chat Application

- Built a real-time chat platform with **NestJS (WebSockets)** and **React** for messaging and live status indicators.
- Implemented **JWT authentication**, **MongoDB** persistence, and typing indicators for enhanced UX.
- Deployed with **Docker** and **CI/CD pipelines**, ensuring reliability and scalability in production.

Car Rental Platform

- Developed a feature-rich car rental web application entirely with **Next.js (SSR, SSG)**.
- Integrated booking workflows, vehicle listings, authentication, and a mock payment system.
- Optimized for **SEO**, **mobile responsiveness**, and performance with **Lighthouse audits**.

Telegram Collaboration Bot

- Built a Telegram bot using **NestJS (Telegraf integration)** to support a trading team with collaboration, real-time alerts, and workflow automation.
- Integrated external **APIs** (market data, financial news) to deliver timely updates and decision-making support directly in chat.
- Designed a modular, containerized architecture with **Docker** and webhook configuration for scalability and high availability.

SNMP Network Monitoring Dashboard

- Built a **Next.js** dashboard to visualize **GNS3** network topologies and monitor **SNMP** metrics in real time.
- Implemented **OID queries** for system performance and automated alerts for fault detection.
- Designed the interface for scalability and real-time monitoring in simulated network environments.

PROFESSIONAL STRENGTHS

- **End-to-End Ownership:** Architect, develop, and deploy full-stack solutions with scalability and maintainability in mind.
- **Rapid Learning:** Quickly grasp new frameworks and tools through hands-on projects and self-driven research.
- **Clean Code Practices:** Write modular, testable, and industry-standard code that ensures long-term maintainability.
- **Problem Solving:** Diagnose and resolve complex technical issues, optimizing performance and reliability.
- **Team Collaboration:** Contribute effectively in agile environments, using Git-based workflows and peer reviews.
- **Adaptability:** Thrive in dynamic settings by adjusting to evolving tech stacks and shifting priorities.