

Mohamed Diao Eldin

Software Engineer – Full-Stack Development

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Professional Summary

Full-Stack Developer . Skilled in both frontend and backend development using **JavaScript, TypeScript, and Python**, with strong experience in **NestJS, Next.js, React, and Node.js**. Comfortable working with different system architectures and databases like **PostgreSQL and MongoDB**. Experienced in integrating external systems, improving performance, and participating in system design discussions. Known for adaptability, problem-solving, and delivering reliable solutions in collaborative environments.

Work Experience

Software Engineer

Juthor | Saudi Arabia (Remote)

Jul 2025 – Present

- Designed and developed **microservices-based architecture**, ensuring modularity, scalability, and efficient inter-service communication.
- Implemented **queue systems using Redis** to manage asynchronous tasks, enhance performance, and improve system reliability.
- Built and maintained integrations with **external systems and services**, including retail platforms and webhook-driven synchronization.
- Collaborated with cross-functional teams and participated in **system design meetings** to ensure scalable architecture and domain compliance.
 - Delivered **high-performance, maintainable solutions** using **NestJS, Next.js, and PostgreSQL**, optimizing for speed, reliability, and ease of deployment.
- **Configured and implemented a reverse proxy setup** to optimize request routing, security, and load management across services.

Software Engineer

Vultara, Inc. | United States (Remote)

Aug 2024 – Jul 2025

- As **Junior Software Engineer** (Aug 2024 – Feb 2025):
 - Assisted in developing and maintaining core features in Vultara's cybersecurity domain, including threat modeling, vulnerability tracking, and automotive security workflows.
 - Gained hands-on experience in software scalability, integration practices, and managing security data.
- As **Software Engineer** (Feb 2025 – Jul 2025):
 - Led end-to-end development of cybersecurity algorithms, dashboards, and third-party integrations.
 - Improved system performance by up to 90% via optimization, refactoring, and adopting efficient system design tailored for automotive cybersecurity platforms.
 - Participated in code reviews and implemented unit testing and continuous integration to ensure reliable, maintainable solutions within a regulated domain.
 - Collaborated with cross-functional and cross-domain teams to ensure timely delivery, domain compliance, and scalability.

Software Engineer Freelance | (Remote)

- Collaborated with clients to develop custom web applications and features tailored to their business needs.
- Designed and implemented backend infrastructure for an **ERP system** used in many universities in Egypt using **Python** and **PostgreSQL**, ensuring data consistency, scalability, and performance.
- Developed and maintained full-stack solutions using modern technologies and frameworks.

Accomplishments:

- Seamlessly integrated a deep learning model into a production-level project.
- Successfully integrated systems not initially designed for interoperability, showcasing adaptability and problem-solving skills.

Skills

- **Languages:** JavaScript, TypeScript, Python, Java, SQL, HTML, CSS
- **Frameworks & Tools:** Node.js, Express.js, NestJS, React.js, Next.js, Angular, Flask, Docker, Git, Linux, CI/CD
- **Databases:** PostgreSQL, MongoDB
- **Concepts:** OOP, Data Structures, Algorithms, SOLID Principles
- **Soft Skills:** Problem-Solving, Communication, Team Collaboration, Adaptability, Time Management

Education

Bachelor's Degree in Management Information Systems

Higher Institute of Advanced Studies | Cairo, Egypt (2018 – 2022)

Graduated with Excellent Honors