

Ahmed Abozaid

Senior Software Engineer

Cairo, Egypt

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LinkedIn GitHub Website

Profile

Results-oriented Senior Software Engineer with strong expertise in Node.js and Java Spring Boot for building high-performance backend systems. Proven track record of designing and delivering scalable microservices architectures and enterprise-grade applications. Experienced in leading the development of low-code/no-code platforms, payment gateways, and real-time communication systems. Comfortable across the full stack using React.js and Vue.js. Currently working on large-scale automation and web scraping solutions at Rayobyte while collaborating with international teams.

Skills

Backend: Node.js, Nest.js, Java Spring Boot

Frontend: React.js, Vue.js

Databases: MySQL, PostgreSQL, MongoDB

DevOps / Tools: Git, Docker, NGINX, ELK Stack, RabbitMQ, Kafka, WebSockets, GraphQL, REST, Prisma, OpenVidu, ActivePieces

Work Experience

Senior Software Engineer Rayobyte, USA (Remote) Nov 2025 – Present

- Work on large-scale web scraping, data extraction, and automation systems with a strong focus on reliability, performance, and anti-detection techniques.
- Design and maintain modular, automated scraping endpoints with configurable fingerprints, headers, and browser behaviors.
- Build and enhance automation flows for request execution, retries, cookie generation, and session handling across multiple targets.
- Refactor and optimize legacy scraping and automation modules, reducing code complexity while preserving full functionality.

Freelance Senior Software Engineer Allup.app, Dubai (Remote) Apr 2024 – Present

- Led maintenance and refactoring of a gym management CRM built on 15 Node.js microservices.
- Delivered real-time analytics dashboards aggregating data from 15+ databases using Nest.js and Node.js, optimized for sub-second response times.
- Built a secure, scalable payment microservice integrating Stripe, Ezypay, and CyberSource using Node.js, Nest.js, Kafka, and HMAC-secured APIs.
- Integrated Hikvision, Sigur, and ZKBio CV gate systems for real-time check-in synchronization via Node.js-based microservices.
- Maintained and enhanced legacy codebases while delivering critical new features within a microservices architecture.

Senior Software Engineer Caudex.ai (Comverse.ai), Dubai / Riyadh (Remote) Feb 2024 – Oct 2025

- Architected and delivered large-scale Node.js and Java Spring Boot backend modules powering multiple AI-driven systems.
- Built and maintained a low-code/no-code code generation engine using Node.js, Nest.js, Prisma, and Docker, enabling automated full-stack project generation.

- Designed and implemented a full-featured WebRTC video conferencing platform using Nest.js, Node.js, MySQL, RabbitMQ, Redis, and React.js.
- Led complex cross-team integrations, ensuring scalability, maintainability, and high code quality.
- Mentored engineers and reviewed designs to ensure robust, performant software delivery.

Software Engineer Connect Professional Services, Cairo (Hybrid) Aug 2022 – Feb 2024

- Developed enterprise supply chain solutions using Java Spring Boot, Node.js, MySQL, and MongoDB to improve operational efficiency.

Software Engineer Meet.LLC, Dubai (Remote) Aug 2021 – Jul 2023
Full-time: Aug 2021 – Jul 2022 Part-time: Aug 2022 – Jul 2023

- Designed and implemented a scalable e-learning platform using C#.NET, Node.js, Couchbase, and RabbitMQ, supporting thousands of concurrent users.
- Built a full-stack online examination system with proctoring features using Django, Node.js, and Vue.js.

Education

MSA University
Bachelor's Degree in Computer Science Sep 2018 – Jul 2022
GPA: 3.51 (Egypt)

University of Greenwich
Dual Degree with MSA University, BSc in Computer Science Sep 2018 – Jul 2022
First Class Honours, GPA: 3.67 (UK)

Projects

Web Scrapping Platform (Rayobyte)
Large-scale web scrapping platform capable of handling thousands of requests per second using Node.js.

Code Generation Engine (Caudex)
Low-code/no-code platform generating full-stack applications (frontend, backend, Dockerfiles) with authentication and permission management, Using Node.js/Nest.js

Gym Management CRM Platform (AllUp)
Maintained, refactored, and enhanced a large-scale gym management CRM composed of 15 Node.js microservices. Improved system stability, performance, and maintainability while implementing new business features across distributed services.

Workflow Engine (Caudex)
Customized ActivePieces workflow engine with custom pieces and an integrated AI agent for intelligent backend automation.

Supply Chain System (Connect Professional Services)
Enterprise-grade supply chain application built using Java Spring Boot, Node.js, MySQL, and MongoDB.

Real-Time Analytics Dashboard (AllUp)
High-performance analytics system aggregating data from 15+ databases for sub-second insights using Node.js

Video Conferencing Platform (Caudex)
WebRTC-based platform supporting mic, camera, screen sharing, private and group messaging, and live collaboration using Node.js

Payment Gateway Microservice (AllUp)
Multi-gateway payment microservice integrating Stripe, Ezypay, and CyberSource using Node.js, Nest.js, and Kafka.

Publication

A. Abozaid and A. Atia, "Multi-Modal Online Exam Cheating Detection"

ICECET, Prague, 2022. doi:10.1109/ICECET55527.2022.9873527

Proposed webcam-based cheating detection techniques (head pose, object detection, eye gaze), achieving 95% accuracy.

Languages

- Arabic — Native
- English — Fluent (Professional Working Proficiency)

Extra Activities

- Technical Core Team Member, Google Developer Student Club (GDSC), MSA University
- Vice President, Sage (Computer Science Community), MSA University
- Head of HR & Coordinator, Student Training Committee (MSA-STC), MSA University

Certifications

- HCIA – Huawei Artificial Intelligence Program
- IBM Cloud Application Developer Mastery Award
- COVID-19 Hackathon Challenge Participant