Mohamed Hamad

Backend Developer

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Backend Developer specializing in building secure, scalable, and high-performance RESTful APIs using Node.js and NestJS. Strong foundation in authentication & authorization systems, database architecture, and clean code principles. Focused on system design fundamentals, performance optimization, and security best practices. Competitive programming background (ECPC) with solid problem-solving skills. Experienced with PostgreSQL, MongoDB, and MySQL. Familiar with frontend technologies (React.js, Next.js) to effectively collaborate across the full stack.

EXPERIENCE

Backend Developer — @*DeverCrowd* (*03/2025 - 10/2025*)
- ❖ Designed and implemented scalable backend architecture using **Node.js & Express.js**.
- ❖ Built secure and high-performance **RESTful APIs** with proper validation and error handling.
- ❖ Implemented **authentication & authorization (JWT, RBAC)** and API security best practices.
- ❖ Designed and optimized **MongoDB databases**, including indexing and performance tuning.
- ❖ Integrated third-party services and handled production deployments.
- ❖ Applied caching strategies and system optimization for improved performance.
- ❖ Collaborated with frontend developers to ensure efficient API consumption.

PROJECTS

Dever Crowd (Live, GitHub)
- ❖ **Overview:** Developed a startup portfolio web application to showcase the company's vision, services, and projects, providing a professional online presence with a fully controlled admin dashboard.
- ❖ **Key Features:** Admin authentication system, content management dashboard, dynamic control of website sections, services and projects management, blog/news management, contact messages management, and role-based access.
- ❖ **Technology:** Node.js, Express.js, MongoDB, Mongoose, RESTful APIs, JWT Authentication, React, NextJS, HTML5, CSS3, Tailwind, JavaScript.

Secure Mail (Github)
- ❖ **Overview:** Developed a secure email client that integrates cybersecurity scanning to detect threats and protect emails in real-time, with an admin dashboard for monitoring and management.
- ❖ **Key Features:** Secure login, email sending/receiving, phishing and spam detection, malicious link and attachment scanning, AI email analysis, threat reports, and dashboard analytics.
- ❖ **Technology:** Node.js, NestJs, PostgreSQL, REST APIs, JWT, IMAP/SMTP, ChatGPT API, React, Next.js, Tailwind CSS, JavaScript.

EDUCATION

Computer Science Bachelor's Degree (*10/2022 - 08/2026*)
Faculty of Computer Science, Obour High Institute

SKILLS

- ❖ **Backend Development**
  - ➢ Node.js (Express.js, NestJS)
  - ➢ RESTful API Design
  - ➢ Authentication & Authorization (JWT, OAuth 2.0)
  - ➢ API Security Best Practices
  - ➢ WebSocket (Socket.io)
- ❖ **Databases & ORM**
  - ➢ PostgreSQL, MongoDB, MySQL
  - ➢ Prisma, Mongoose, TypeORM
- ❖ **Cloud & Integration**
  - ➢ Google Cloud
  - ➢ Redis (Caching & Performance Optimization)
  - ➢ Cloudinary (Media Storage)
  - ➢ Stripe (Payment Integeration)
  - ➢ Nodemailer (Email Service)
- ❖ **DevOps & Tools**
  - ➢ Git
  - ➢ Docker
  - ➢ CI/CD
  - ➢ Postman
  - ➢ Agile / Scrum
- ❖ **Security & Other**
  - ➢ Basic Penetration Testing
  - ➢ Role-Based Access Control (RBAC)
  - ➢ Caching Strategies
  - ➢ Networking Fundamentals
  - ➢ Linux

CERTIFICATIONS / ACHIEVEMENTS

- ❖ ECPC Qualifications AAST Alexandria
- ❖ 3rd Rank on Competitive Programming Local Contest ICPC Obour Community
- ❖ Mahara Tech Backend Developer certificate
- ❖ Mahara Tech Cybersecurity for Beginner certificate

VOLUNTEERING

- ❖ Leader of Cybersecurity Track at IEEE Obour Student Branch
- ❖ Mentor & Coach at ICPC Obour Student Branch

LANGUAGES

- ❖ Arabic (Native)
- ❖ English (B2)