

Omar Elgouhary

Giza, Egypt | +201044054104 | contact@omar-dev.me | [github](#) | [linkedin](#)

Backend-focused Computer Science student passionate about building scalable, secure backend systems using Node.js, TypeScript, and modern architecture principles. Experienced in developing production-ready APIs with authentication, payments, and analytics.

Projects

E-Commerce Backend API

Node.js, Express, TypeScript, PostgreSQL, Prisma ORM, Redis, BullMQ, Docker

- Built a modular e-commerce backend with JWT auth, RBAC, refresh token rotation, and async workers using BullMQ.
- Developed catalog APIs with filtering, pagination, and Redis caching for performance improvement.
- Integrated Stripe payments and Cloudinary for secure checkout and media management.
- Implemented admin dashboard APIs using Raw SQL aggregations and Redis caching for real-time metrics and inventory alerts.
- Improved reliability through structured logging (Pino) and integration testing with Vitest.

Natours – Tourism API

Node.js, Express, JavaScript, Mongoose, Stripe, Multer, Sharp

- Built a layered RESTful API with reusable CRUD handlers and MongoDB aggregation pipelines.
- Implemented geospatial search and tour analytics features using advanced MongoDB queries.
- Integrated Stripe Checkout alongside an optimized image-processing pipeline using Multer and Sharp.

Skills

- **Languages & Frameworks:** Node.js, Express, TypeScript
- **Databases:** PostgreSQL, MongoDB, Redis
- **Architecture & Patterns:** Modular Architecture, RBAC, Event-Driven Architecture, Async Processing
- **Tools & DevOps:** Prisma ORM, Docker, Git, CI/CD Pipeline, BullMQ
- **Engineering Practices:** REST APIs Design, SOLID Principles, Logging, Integration Testing

Education

October 6 University

Computer Science • 2024 - 2028