

Yahia Mohamed Zakaria

Communication and Computer Engineering Student | Backend Developer (Node.js / TypeScript)

+20 111 643 3434 | devyahiazakaria@gmail.com | linkedin.com/in/yahiamzakaria | github.com/devYahia | yahia.website

SUMMARY

Fourth-year Communication and Computer Engineering student at Mansoura University, graduating January 2027. Builds backend services in Node.js, Express, and TypeScript, with hands-on experience in REST API design, MVC layering, schema validation, session-based authentication, and MongoDB data modelling. Seeking a software engineering internship where I can contribute to a production codebase and learn from experienced engineers.

EDUCATION

Mansoura University

Dakahlia, Egypt

B.Sc. in Communication and Computer Engineering (CCE)

Sep. 2022 – Jan. 2027 (expected)

- Relevant coursework: Data Structures, Algorithms, Object-Oriented Programming, Database Systems, Operating Systems, Computer Networks
- Member of **Cat Reloaded**, a student-led engineering community; completed its structured Node.js backend track (TypeScript, Express, MongoDB, MVC, validation, authentication)

PROJECTS

Secure Image Gallery | TypeScript, Node.js, Express, MongoDB, Mongoose, EJS, Multer

2026

- Built a full-stack image sharing application with session-based authentication (**express-session**) and **bcrypt** password hashing, gating the upload and delete routes behind auth middleware and enforcing an ownership check that rejects deletes on photos the requesting user does not own
- Hardened file uploads with **Multer**: dual MIME-type and file-extension allowlisting, a 10 MB size cap, and a single-file-per-request limit to reject spoofed or oversized uploads
- Separated concerns across routes, controllers, models, and middleware, validating request bodies with **Zod** before they reach the controller layer

User Management Dashboard | TypeScript, Node.js, Express, MongoDB, Mongoose, EJS, Zod

2026

- Developed a server-rendered admin panel implementing full CRUD over a Mongoose-backed user collection, organised in a strict **MVC** structure
- Implemented centralized error-handling middleware and flash messaging so validation and database failures surface as user-facing feedback instead of unhandled exceptions, with shared TypeScript interfaces keeping controller, model, and view layers type-consistent

Shopping Cart REST API | TypeScript, Node.js, Express, MongoDB, Zod

2026

- Designed a JSON REST API for cart lifecycle operations, merging item quantities on repeat adds rather than creating duplicate line items, with correct HTTP semantics throughout
- Built a reusable validation middleware driven by **Zod** schemas, using **z.infer** to derive request types from the schemas and keep validation and TypeScript types in sync

Interna.work – AI Internship Simulator | Next.js, TypeScript, FastAPI, PostgreSQL

2026

- Placed **14th out of 122 teams** at GDG Hackathon 2026 as part of a five-person cross-functional team working to a three-day deadline
- Contributed the majority of the team's commits (98 of 153) across the Next.js dashboard, the FastAPI application layer, and the database schema, and coordinated frontend-backend integration under time pressure

First Word – Arabic Sign Language Translation | Graduation Project; Unity, Meta Quest 3

2025 – Present

- Team graduation project translating Arabic Sign Language bidirectionally on Meta Quest 3 via VR hand-tracking; responsible for the speech pipeline (speech-to-text and text-to-speech) feeding the Unity recognition layer

TECHNICAL SKILLS

Languages: JavaScript (ES6+), TypeScript, HTML, CSS

Backend: Node.js, Express.js, REST API design, MVC architecture, Zod validation, session-based auth, bcrypt, Multer, middleware design

Databases: MongoDB, Mongoose ODM, SQL (joins, aggregation, subqueries), relational and document modelling

Tools: Git, GitHub, Linux, Postman, npm, EJS

Currently learning: PostgreSQL, Prisma ORM, Jest/Vitest, Redis, Docker, CI/CD, Data Structures and Algorithms

Spoken languages: Arabic (native), English (professional working proficiency – EF SET 54 / CEFR B2)