# ZIYAD MOHAMED ALBOGHDADY

Backend Developer · C# · ASP.NET Core · REST APIs · PostgreSQL · Docker
Sakarya, Türkiye | +90 554 027 5485 | ziyadalboghdady@gmail.com
ziyad-alboghdady.netlify.app | github.com/ziyad-alboghdady | linkedin.com/in/ziyad-alboghdady-a50ab8247

## SUMMARY

Third-year Software Engineering student and backend developer building ASP.NET Core Web APIs with PostgreSQL, EF Core and Docker. Built a containerised API with JWT authentication, user-scoped data access and background jobs with retries; project manager and backend developer of an eight-person ASP.NET Core 8 team; volunteer researcher at Sakarya University's CyberSense Laboratory. Seeking a backend engineering internship.

## EDUCATION

**B.Sc. Software Engineering — Sakarya University**, Türkiye *Expected 2028*
**Full merit scholarship** · GPA 3.63 / 4.00 · 4.00 / 4.00 in the most recent semester · GPA rising every semester

## EXPERIENCE

**Undergraduate Researcher (volunteer)** — CyberSense Laboratory, Sakarya University *Aug 2026 – Present*

- Work on a machine-learning DDoS detector that runs inside the Snort 3 intrusion-detection engine on a 1 Gb/s lab test bench and flags an attack from the first two packets of a connection; trained with XGBoost on 1.19M connections the team labelled from raw network captures.
- Showed that the model's near-perfect score (ROC-AUC 0.99999) came from recognising the attacked server, not the attack: one server setting appeared in 99.74% of attack traffic, and without such features false alarms on 20 unseen machines rose from 0.037% to 47–52%.

**Project Manager & Backend Developer — Campusly** (team project, Sakarya University) *Sep 2026 – Present*

- Lead an eight-person team (five backend, three frontend) and develop the backend of a campus platform (map, maintenance reporting with duplicate detection, events, transport) in ASP.NET Core 8 Web API, PostgreSQL, EF Core and JWT authentication.
- Own the frontend–backend API contract (OpenAPI), scope and schedule; set a mid-project checkpoint that drops a module if the core is not working by a fixed date.

**Web Developer (pro bono)** — Elmas Grup Gayrimenkul · bilingual real-estate website in Next.js, with one teammate *2026*

**Translator (Arabic–Turkish–English)** — Turkish Ministry of National Defence, IDEF · Iraqi Minister of Defence delegation *2025*

## PROJECTS

**Task Management API** — .NET 9 | ASP.NET Core | PostgreSQL | Docker | Supabase Auth *2026*

- Containerised REST API (controllers → services → repositories) with JWT authentication in custom middleware; every query is scoped to the signed-in user, and another user's task returns 404 rather than 403 so the API never reveals it exists.
- Background job pipeline: long requests return 202 with a status endpoint, failed jobs retry with exponential backoff, and a scheduled heartbeat flags stuck jobs; checked by a 16-step automated smoke-test script.

**Car Rental Management System** — ASP.NET Core MVC | EF Core | PostgreSQL

- Seven-module platform on a normalised 12-table PostgreSQL schema, with constraints, stored functions and triggers enforcing business rules in the database; ASP.NET Identity role-based access, plus ERD and requirements documentation.

**ReviseNext — Study Prioritisation Backend** — .NET | Hangfire | LLM | Docker *2026*

- Ranks revision topics by weakness, exam proximity and recency, returning a plan where every line states its reason; idempotent nightly job, LLM-generated checklists and a weekly PDF report. FlyRank Backend AI Engineering capstone.

**Cached Personnel System with Local LLM** — Spring Boot | Redis | MySQL | Hadoop HDFS | Ollama *Oct 2026*

- Reads and updates personnel data through a Redis cache that periodically flushes to MySQL for durable storage, stores employee images in Hadoop HDFS, and adds a chat page backed by a local Llama 3.2 model.

## RESEARCH

**Research paper, first author:** "What a First-Packet DDoS Detector Really Learns" *In preparation*

**TÜBİTAK 2209-A research proposal:** Prompt-injection detection in Turkish web text (separate team project) *Proposal · 2026*

## TECHNICAL SKILLS

**Languages:** C#, Java, SQL, JavaScript, C++
**Backend:** ASP.NET Core (Web API, MVC), EF Core, ASP.NET Identity, Spring Boot, REST APIs, JWT auth, background jobs, OpenAPI
**Databases:** PostgreSQL, SQL Server, MySQL, MongoDB, Redis, Hadoop HDFS · schema design, normalisation, triggers & stored functions
**ML & Security:** XGBoost, ONNX Runtime, feature engineering, data-leakage diagnosis, host-disjoint evaluation, Snort 3, pcap analysis
**Practices & Tools:** OOP, SOLID, layered architecture, Repository pattern, Git, Docker Compose, Postman, Linux, Agile

## AWARDS, CERTIFICATIONS & LANGUAGES

**Awards:** Rise Global Finalist, top 500 of 131,000+ (2022) · IoT & AI Competition, 2nd in Egypt, 5th in the Middle East · 24H Innovation Challenge, 2nd place (2026) · Düzce University Hackathon, Best Design (2026)
**Certifications:** FlyRank AI Internship, remote programme: AI Fluency certificate (2026); Backend AI Engineering capstone under review · Rise Entrepreneurship Bootcamp, University of Chicago
**Languages:** Arabic (native) · English C1 (IELTS 7.0) · Turkish C1 · Russian A2 · French A1