



Halil Toksöz

Date of birth: 17/08/2000 | **Nationality:** Turkish | **Phone number:** (+90) 5543216604 (Home) |

Email address: toksozhalil@gmail.com | **Website:** <https://www.haliltoksoz.com/> | **LinkedIn:**

<https://www.linkedin.com/in/halil-toksöz-2b634317b/> | **Github:** <https://github.com/haliltokszz> | **HackerRank**

: <https://www.hackerrank.com/toksozhalil> | **Address:** 35190, İzmir, Türkiye (Home)

ABOUT ME

Driven by a passion for computer engineering, I started my journey at a young age, crafting my first PHP website at 11 and developing a Unity game at 13. With over 8 years of expertise (including 5+ years of professional experience), I specialize in backend development and software architecture. I design scalable, maintainable, and high-performing systems using cutting-edge technologies and principles such as Clean Architecture, SOLID principles, microservices, and event-driven architectures. Recognized for leadership in system design, applying software architectural best practices and design patterns, I consistently mentor teams and deliver business-critical features with exceptional efficiency. As a Computer Engineer, I excel at guiding strategic design decisions and aligning software solutions with organizational goals.

COMMUNICATION AND INTERPERSONAL SKILLS

Skills

- **Programming & Frameworks:** .NET Core (C#), PHP (Laravel), Node.js (Express.js, Nest.js), Angular, React, Next.js, Flutter (Dart), SQL (PostgreSQL, MsSQL, MySQL), NoSQL (MongoDB), JavaScript, TypeScript, Python, Java.
- **Architectural & Design:** Clean Architecture, Domain-Driven Design (DDD), Microservices, Event-Driven Design, SOLID principles, Design Patterns (Adapter, Factory, Strategy, Repository, CQRS, Observer), OOP & AOP, Data Structures and Algorithms, Software Architectures and System Design (High-Level & Low-Level)
- **DevOps & Tools:** Docker & Docker Compose, Jenkins, Azure DevOps (TFS), Git & Github CI/CD, Jira, Gitlab, Vault, Grafana, Prometheus, OpenTelemetry, RabbitMQ, MassTransit, Redis, Hangfire, EF Core.
- **Soft Skills:** Analytical thinking, problem-solving, leadership, effective communication, teamwork, adaptability, time management.

WORK EXPERIENCE

 **SSTTEK** – İSTANBUL, TÜRKİYE

SENIOR BACKEND DEVELOPER – 02/2025 – CURRENT

- In collaboration with the Software Architect, **led the architectural refactoring** of the WMS/TMS microservices project (DDD, Clean Architecture, and MediatR & CQRS Pattern) by proposing improvements, then planning and implementing the changes independently.
- Implemented cargo service integrations (Yurtiçi Kargo and Kolay Gelsin) using Adapter, Strategy, and Factory design patterns to enhance maintainability, reusability, and extensibility.
- **Assumed leadership of the development team** during the team leader's leave, overseeing Stage and Production releases to ensure project continuity.
- **Participated in technical interviews** for Senior Backend Developer candidates alongside the Software Architect, contributing to the recruitment process.
- **Technologies:** .NET 8, PostgreSQL, Docker, Jenkins, Vault, MassTransit, RabbitMQ, Redlock, Grafana, Prometheus, OpenTelemetry, AutoMapper, Fluent Validation, MediatR

 **FORWARDIE** – İZMİR, TÜRKİYE

SENIOR BACKEND DEVELOPER – 08/2023 – 02/2025

- Contributed to a large-scale microservices project built on PHP 7.4 and Laravel 8, handling system architecture, feature development, debugging, code refactoring, and architectural improvements. Provided technical support to other developers.
- Played a key role in the architectural design phase of new microservices, acting as the primary architectural consultant and working closely with the team leader.
- Advocated for adopting gRPC as the communication protocol between microservices; developed a FileServer demo with .NET Core and Nest.js in three days and successfully presented the strategy to the team.
- Designed infrastructure and architecture for AI-based automations using OpenAI APIs, simplifying development and reducing integration time for new automation features.
- Delivered outstanding performance in sprint cycles, achieving first place in six sprints over three months and significantly exceeding story point targets (e.g., 105 story points in one week vs. an expected 25).
- **Technologies:** PHP 7.4 & Laravel 8, MySQL, AWS S3, Redis, OpenAI API, Google Document AI (OCR), NGINX, Docker

 **MALLCONOMY** – İZMİR, TÜRKİYE

MID. BACKEND DEVELOPER – 03/2023 – 07/2023

- Improved system performance and user interaction for a microservices project (approximately 100,000+ users) using .NET Core and MongoDB using Event Driven Design, Thread Management, LINQ best practices, and MongoDB Aggregation Pipelines & Indexes techniques.
- Planned and designed software architecture for new features, implementing technical solutions, and executing code improvements to drive efficiency and performance.
- Led Docker and Kubernetes infrastructure to migrate to a microservices architecture, reducing deployment time and improving scalability.
- Developed an automated system using Google Sheets API to handle ban operations, reducing processing time from 5 days (manually) to under 5 hours (programmatically) for 50,000 users.
- Integrated Web3 tools (Node.js) to retrieve NFT data from blockchain smart contracts and communicated it to a .NET Core microservice via Azure Service Bus (message broker).
- Technologies:** .NET Core, MongoDB (NoSQL), Azure Service Bus, Docker, Kubernetes, Node.js, Metamask Wallet

🏢 SISKON AUTOMATION & SOFTWARE – İZMİR, TÜRKİYE

MID. BACKEND DEVELOPER – 02/2022 – 03/2023

- Planned, developed, refactored, and debugged .NET Core software components for machine communications using TCP/IP socket programming based on functional requirements.
- Implemented advanced algorithms and asynchronous programming, reducing data collection waiting time **from 20 minutes to 1 minute** and improving overall application performance.
- Improved code maintainability and scalability by optimizing T-SQL queries, refactoring project architecture, and externalizing configuration data automatically into XML files to reduce manual operation process time and reusability.
- Mentored two interns, fostering their technical growth and contributing to team development.
- Contributed to team decision-making, playing a key role in delivering high-quality software solutions.
- Technologies:** .NET Core 6, MsSQL, TFS, Azure, WCF, TCP/IP Socket Programming

🏢 AMATIS – İZMİR, TÜRKİYE

JR. FULLSTACK DEVELOPER – 01/2021 – 12/2021

- Spearheaded end-to-end development of a microservice-based web application using .NET 5 and Angular 11.
- Integrated Hangfire for event scheduling and management (handling 84 events) instead of recurring every 1 minute manual Background Worker, improving system performance and reliability.
- Developed role-based scheduled email and notification services with Hangfire, enhancing user experience and increasing engagement.
- Implemented advanced filtering features (using expression trees and reflection), reducing user search time by 40%.
- Prototyped a new product within two days, demonstrating strong design and development skills under tight deadlines.
- Designed and developed core infrastructure using Clean Architecture, CQRS, AOP, and OOP principles for future project reuse.
- Technologies:** .NET 5, Angular 11, PostgreSQL, TypeScript, Git, Autofac, AutoMapper, FluentValidation, MediatR, RabbitMQ & MassTransit, MinIO Cloud, Docker, SignalR, Hangfire, Ocelot, RxJS, D3.js

PROJECTS

11/2024 – CURRENT

ChronoPlan - AI Habit Tracker & Daily Planner

- Developed **ChronoPlan AI**, a mobile application providing personalized time management and habit-building guidance for users with ADHD traits.
- Implemented AI-driven personalization (LLM) to analyze user behaviors and chronotypes, delivering tailored recommendations for task prioritization, habit tracking, and time-blocking.
- Integrated neurologically supported methodologies and evidence-based strategies to guide habit formation and productivity.
- Designed a user-friendly Flutter interface with Riverpod state management for high engagement.
- Technologies:** Flutter (Dart), .NET 8 (.NET Aspire), PostgreSQL, Docker & Docker Compose, NGINX & Ubuntu VPS, MediatR, AutoMapper, FluentValidation, RabbitMQ & MassTransit, Redis distributed cache, OpenTelemetry, OpenAI API, OneSignal (notifications), RevenueCat (In-App subscriptions), Google/Firebase Analytics.

Links <https://github.com/ScannyBear/Habit-AI> | <https://github.com/ScannyBear/HabitAI-Backend> | <https://chronoplanapp.com/>

06/2024 – 08/2024

Financial OCR

- Developed an automated invoice processing solution for accounting firms, leveraging OCR and AI to extract data and automate VAT and tax calculations.
- Employed the C4 model for clear system architecture visualization and Clean Architecture for maintainability.
- Utilized event sourcing with RabbitMQ, MediatR & CQRS Pattern, and Azure Load Balancer to handle complex transactions at scale (100,000 invoices monthly and support 100 concurrent uploads).
- Implemented JWT and OAuth2 for security and integrated Google Document AI and OpenAI API for accurate data extraction.
- Technologies:** Frontend: Next.js, Shadcn UI; Backend: .NET 8 (NET Aspire), PostgreSQL, Google Document AI, OpenAI API, Azure Blob Storage, RabbitMQ & MassTransit, Redis, Serilog, OpenTelemetry, NGINX, Azure.

Links <https://github.com/ScannyBear/FinancialOCR-Backend> | <https://github.com/ScannyBear/FinancialOCR-Client>

Clean Architecture — Kodlama.io.Devs

- Built a robust infrastructure using the Clean Architecture approach with .NET Core 6, CQRS, and MediatR.
- Applied AOP principles with Autofac and integrated tools like Swagger, Serilog, FluentValidation, EntityFramework, Redis, SignalR, RabbitMQ, and Elasticsearch (Full-Text Index Search).
- **Technologies:** .NET Core 6, EF Core, MsSQL, Autofac, CQRS, MediatR, Redis, RabbitMQ, Elasticsearch.

Link <https://github.com/haliltokszz/Kodlama.io.Devs>

18/12/2021 – 08/01/2022

Rent a Car

- Developed end-to-end car rental web application with .NET Core and Angular.
- Implemented cross-cutting concerns using AOP and design patterns (Adapter, Repository, Observer, Factory).
- **Technologies:** .NET Core, Angular, Autofac, AutoMapper, Swagger, Entity Framework, RxJS.

Link <https://github.com/haliltokszz/RentaCar>

18/05/2020 – 21/05/2020

HR Management

- Developed HR Management desktop application with C#.
- Used these Data Structures: **Binary Tree, Hash Chain, Graph.**

Link <https://github.com/haliltokszz/VeriYapilariProje-InsanKaynaklariBilgiSistemi>

EDUCATION AND TRAINING

08/2018 – 05/2022 İzmir, Türkiye

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING İzmir Bakırçay University

Relevant Coursework: Software Architecture and Design, Advanced Web Programming, Object Oriented Programming, Algorithm Analysis and Design, Parallel and Distributed Programming, Computer Networks, Operating Systems, Machine Learning, Introduction to Natural Language Processing, Deep Learning.

Achievements: Vice-president and founding member of the AI Community.

GPA: 3.24

Website <https://bakircay.edu.tr/> | **Final grade** 3.24

İzmir, Türkiye

GDG DEVFEST IZMIR 2022 — GOOGLE DEVELOPERS GROUP GDG DevFest - Google Developers Group

Website <https://developers.google.com/community/devfest?hl=tr>

16/06/2022 – CURRENT

AWS CLOUD PRACTITIONER ESSENTIALS DAY WEBINAR — AWS AWS

Website <https://aws.amazon.com/tr/events/webinars/NAMER-event-OE-20230403-AWS-Cloud-Practitioner-Essentials-Day-2023-reg-event/>

İzmir, Türkiye

GDG DEVFEST IZMIR 2018 — GOOGLE DEVELOPERS GROUP GDG DevFest - Google Developers Group

Website <https://developers.google.com/community/devfest?hl=tr>

SENIOR .NET COURSE Kodlama.io

Website <https://www.kodlama.io/p/yazilim-gelistirici-yetistirme-kampi1>

07/01/2021 – 22/03/2021

.NET AND ANGULAR FULL-STACK COURSE Engin Demiroğ

Helped new programmers on Kodlama.io Discord Channel as a Q&A Support Officer.

Website <https://kodlama.io/p/yazilim-gelistirici-yetistirme-kampi>

05/04/2022 – CURRENT

PROBLEM SOLVING INTERMEDIATE CERTIFICATE HackerRank

Website <https://www.hackerrank.com/certificates/3bea3b3ab314>

Website <https://www.udemy.com/certificate/UC-299f7c47-e47a-4d11-bab5-5ba151795e14/>

PUBLICATIONS

2023
gRPC - Ultimate Guide

Link <https://medium.com/@haliltoksz/mastering-grpc-the-ultimate-guide-9e6e65ff9f71>

2019
Yazılım Yaşam Döngüleri

Link <https://medium.com/@haliltoksz/yazılım-yaşam-döngü-modelleri-d2e8696ab50e>

LANGUAGE SKILLS

Mother tongue(s): **TURKISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B1	B1	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user