

Halis Çağatay Karakurt

FULL STACK DEVELOPER

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Summary

I am an experienced full-stack software developer with additional expertise in network infrastructure, system administration, and automation. I have hands-on experience in developing web-based applications as well as managing servers, ensuring network security, and setting up communication infrastructures.

I have been learning about artificial intelligence and automation systems, aiming to integrate these into future projects. I am particularly interested in integrating AI technologies into software development workflows and building scalable systems. I am expanding my knowledge in data analytics, machine learning, and AI-powered applications.

I actively build my own system infrastructures, working on home servers, private VPN networks, and self-hosted communication systems. My focus is on creating secure, accessible, and resilient solutions.

My goal is to integrate my software development expertise with AI to build efficient, intelligent, and automated systems, and to transition into a more AI-focused professional role.

Technical Skills

Software Development (Full-Stack, AI)

Backend

Node.js, Java, Spring Boot

Frontend

JavaScript, Angular, Vue, React, HTML/CSS, Bootstrap

Databases

PostgreSQL, MySQL, MongoDB, SQLite

DevOps & Infrastructure

Docker, Tailscale, Cloudflare, Nginx

AI Deployment & Quantization

Deployments: Llama, Qwen, Deepseek R1, (Q2, Q4, Q8 optimization)

AI Automation & Integration

n8n, API deployment, AnythingLLM

Networking & System Administration

OS

Linux (Debian, Ubuntu, Mint), Windows

Self-Hosting

CasaOS, Nextcloud, Jellyfin, Portainer

Security & Encryption

SSL, Tailscale VPN, WireGuard, Cloudflare Tunnels, Firewall

Filmmaking, Photography & 3D Design

Editing & Color Grading

Davinci Resolve, Adobe Premiere, Log & LUTs

Cinematography

Lighting, Shot Composition, Experimental Filmmaking

3D Design & Prototyping

Autodesk Fusion 360, 3D Printing

Education

Algebra University College

SOFTWARE ENGINEERING (EXCHANGE PROGRAMME) B.Sc.

Zagreb, Croatia

2016 – 2017

Bilkent University

COMPUTER TECHNOLOGY AND INFORMATION SYSTEMS B.Sc.

Ankara, Turkey

2014 – 2019

Anadolu University

LABOR ECONOMICS AND INDUSTRIAL RELATIONS (LEFT UNFINISHED)

Eskişehir, Turkey

2010 – 2013

Awards

Senior Project Second Runner Award

BILKENT UNIVERSITY

2018

High Honor Degree

BILKENT UNIVERSITY

2015-2016 Spring

Honor Degree

BILKENT UNIVERSITY

2014-2015 Spring

Experiences

OBSS

[Istanbul, Turkey](#)

FULL STACK DEVELOPER

07/2022 - 09/2024

Goal: Develop modern user interfaces and adapt old infrastructure for Garanti BBVA and Turkish Airlines projects.

Key Contributions: Developed UI with Angular 2+ for Garanti BBVA's payment system, maintained legacy JAVA infrastructure, fixed bugs in JSP/VueJS hybrid app, and performed backend maintenance for Turkish Airlines' JAVA application.

Achievements: Enhanced skills in Angular 2+, VueJS, and JAVA integration, improved agile collaboration, optimized legacy system transitions.

Comodo (NuRD)

[Ankara, Turkey](#)

FULL STACK DEVELOPER

11/2018 - 07/2022

Goal: Work on the cWatch project and internal applications, focusing on front-end development.

Key Contributions: Developed front-end with AngularJS and Java AWS Lambda, improved CSS skills, contributed to internal projects using Angular 2+, VueJS, and ExpressJS.

Achievements: Strengthened CSS and front-end skills, supported multiple teams with VueJS and CSS, led training sessions for internal teams.

ICES Turkey

[Istanbul, Turkey](#)

SEO SPECIALIST

01/2018 - 12/2018

Goal: Optimize website SEO and ensure smooth coordination between stakeholders.

Key Contributions: Managed SEO optimization, coordinated between SEO agency, ICES, and developer company, expressed technical needs.

Achievements: Improved SEO strategies, facilitated cross-team communication, ensured project progress without delays.

Ogemsan

[Ankara, Turkey](#)

FULL STACK DEVELOPER - PART TIME

04/2017 - 07/2018

Goal: Develop a web application similar to Airbnb for a tourism company.

Key Contributions: Developed back-end with Java Spring Boot, designed project structure, managed Angular controllers and services.

Achievements: Led a small Agile team, improved backend development skills, contributed to both back-end and front-end processes.

Projects

Project Mayhem (2024) (Solo)

CASAOS, NEXTCLOUD (TALK & MAPS), TAILSCALE, WIREGUARD, CLOUDFLARE, AI MODELS (LLAMA, QWEN, DEEPSEEK R1),

ANYTHINGLLM

Goal: Establish a self-hosted, VPN-based communication infrastructure for crisis scenarios.

Set up Nextcloud Talk for messaging and VoIP, integrated a local map tiles server for navigation, created a private VPN network with Tailscale and WireGuard, and deployed AI chatbot models on a home server.

Achievements: Built a resilient, solar-powered infrastructure; ensured communication without reliance on external DNS; enabled AI-based remote assistance via AnythingLLM.

Project Real World (2023) (Solo)

<https://hck.icu/software/construct>

JAVASCRIPT (WORKER), WebGL, THREEJS, SOCKETJS, EXPRESSJS, REDIS

Goal: Build a dynamic, 3D MMORPG platform with a theoretically infinite map, utilizing only JavaScript for both client and server-side.

Key Contributions: Developed client-side with Three.js for 3D rendering, used JavaScript Workers for socket management, built server-side with Socket.io and Redis for player connections and data handling, optimized dynamic area transitions and map rendering.

Achievements: Strengthened skills in WebGL and Three.js for 3D environments, optimized performance using worker threads, enhanced server-client communication through Redis and Socket.io, created an illusion of infinite world navigation with efficient resource management.

Invoice Archive (2020)

VUEJS, AWS (API GATEWAY, LAMBDA, S3)

Goal: Build a mobile-responsive web app for secure E-Invoice creation and storage, ensuring compliance with Turkey's 5-year retention policy.

Key Contributions: Developed app with Vue.js, integrated tax office API, used AWS (API Gateway, Lambda, S3) for storage and processing.

Achievements: Enhanced skills in serverless architecture with AWS, improved compliance and security handling for sensitive data.

Le Stock Cloud Photo Storage (2018) (Solo)

NATIVESCRIPT, JAVA, SPRING BOOT, AWS (EC2, S3, GLACIER)

Goal: Build a secure cloud photo storage app with mobile access, ensuring data security and efficient photo management.

Key Contributions: Developed backend with Java/Spring Boot, integrated AWS (EC2, S3, Glacier), built mobile app with NativeScript

Achievements: Enhanced skills in cloud services (AWS), strengthened backend development and mobile app integration.

Leprikon Dataset Provider (2019) (Senior Project)

ANGULAR, PYTHON, JAVA, SPRING BOOT

Goal: Develop an API and web client to provide datasets derived from Bitcoin blockchain data.

Key Contributions: Built the backend API, generated datasets using Python, stored data in MongoDB, ensured robust performance.

Achievements: Enhanced data handling and API integration, gained experience with MongoDB for NoSQL database management.

Getirici Web Application (2018) (Solo)

TECH STACK: ANGULAR, JAVA, SPRING BOOT, MYSQL

Goal: Mobile-responsive web app for managing product listings, orders, and deliveries.

Achievements: Strengthened Java, Spring Boot, and MySQL skills; optimized user experience with seamless UI/UX.

Key Contributions: Developed full-stack functionality, created customer, store owner, and transporter interfaces

BHB Cryptor (2016) (Junior Project)

TECH STACK: JAVA, JAVA SWING

Goal: Build a desktop messaging app based on email service with a custom encryption algorithm.

Key Contributions: Developed messaging platform with Java Swing, implemented custom unique encryption algorithm.

Achievements: Gained experience in Java Swing, strengthened cryptography knowledge by creating a custom encryption method.

Activities

Ankara Karting Society

PILOT, PHOTOGRAPHER, VIDEOGRAPHER

I regularly participate in tournaments as a pilot, photographer, and videographer. I have achieved first and second-place finishes in multiple tournaments held in Ankara. Additionally, my teammate and I publish videos of the competitions and our training sessions on our YouTube channel.

Model United Nations

VIDEO DIRECTOR & EDITOR

I produced various videos for the conference, including advertisements, fictional crisis scenarios for discussion sessions, and musical content.

I managed the entire production process—from concept development to final editing—ensuring all videos met the conference's needs and contributed to a dynamic and engaging event.

Bilkent University Musical Society

VIDEO PRODUCTION TEAM

I created video clips for the Bilkent Musical Society. I was responsible for scripting the stories written by the society, as well as directing, filming, and editing the clips.

Anadolu University Marketing Anadolu

VIDEO PRODUCTION TEAM

I produced promotional videos for conferences and provided IT support during events. This included creating engaging video content to promote the conference and ensuring smooth technical operations throughout the event.