

MELTEM ÖZTÜRKCAN

Full Stack .NET Developer | R&D-Focused Technologist

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TECHNICAL SKILLS

.NET Development, Backend & System Architecture: **C#, .NET 8/9, ASP.NET Core, Web API, MVC, Entity Framework, CQRS, Onion Architecture, Repository Pattern, SignalR, Dapper, LINQ, ADO.NET, RESTful API Design, Microservices, Node.js, JavaScript, React.js, HTML5, CSS3, Bootstrap, Django, Wagtail CMS (Python), Flutter (basic app integration), Angular, Python, JWT**

Tools & DevOps: **Docker, Azure, GitHub Actions CI/CD, Postman, Swagger, Agile/Scrum Methodologies**

AI, Data & Research Technologies: **Gemini API, AI Model Integration, Data Preprocessing & Analysis, MSSQL, PostgreSQL, MongoDB, Redis, SQLite, MySQL, Stored Procedures, Database Optimization, Indexing & Data Integrity, BLE Beacon, IoT Communication (RSSI/AoA), SignalR Real-Time Data Streaming, System Architecture Design, SCOR-based Performance Analysis,**

PROFESSIONAL EXPERIENCE

FULL STACK .NET & AI DEVELOPER, *Mindsane – MEF University BAP Project* | İstanbul

February 2025 – Present

- Designed and developed an **AI-powered Smart Warehouse Management System**, officially funded by MEF University under its **Scientific Research Projects (BAP)** program.
- Architected a scalable backend using **ASP.NET Core 8, Web API, SignalR, and PostgreSQL**, enabling real-time communication and data-driven performance monitoring.
- Integrated **BLE beacon technology** and **IoT-based localization algorithms** for intelligent warehouse tracking and digital twin simulation.
- Applied **SCOR-based performance analytics** and led the preparation of **TÜBİTAK 1507 grant documentation**, including SWOT and PESTEL analyses.
- Collaborated with cross-functional teams to ensure AI modules developed in **Python (Scikit-learn, Gemini API)** were efficiently integrated into the system's architecture.

Technologies: .NET Core 8, Web API, SignalR, PostgreSQL, MSSQL, Python, Scikit-learn, Gemini API, BLE Beacon, Docker, Azure, Git

FULL STACK .NET DEVELOPER, *Dataprom* | İstanbul

December 2024 – January 2025

- Developed a **web-based device management and monitoring platform** for iBeacon infrastructure.
- Designed and optimized the database using **MSSQL** and high-performance stored procedures for big data operations.
- Built and deployed backend modules with **Node.js, Express.js**, and integrated **RESTful APIs** for cross-system communication.
- Improved signal tracking and personnel-tag assignment workflows by **20%**, streamlining operational efficiency.

Technologies: Node.js, Express.js, MSSQL, Webix UI, RESTful API, Stored Procedures, Git, Docker

SOFTWARE DEVELOPER, *Freelancer*

Various Clients – *Final VIP Schools, SM Hair Clinic*

June 2017 – May 2024

- Delivered custom **CRM systems and web design solutions**, covering full project lifecycle from UI/UX to backend integration.
- Built modular, maintainable codebases using **.NET MVC, HTML/CSS**, and **JavaScript** frameworks.
- Ensured scalability and client satisfaction by implementing best practices in **data validation, form handling, and report automation**.

Technologies: .NET Core, MVC, JavaScript, HTML, CSS, MSSQL, Bootstrap

SOFTWARE DEVELOPER INTERN, *State Hydraulic Works (DSİ) - 14th Regional Directorate*

May 2023 – July 2023

Developed internal web applications using **.NET Core 6** and **T-SQL**, improving user experience and database performance.

JUNIOR SOFTWARE DEVELOPER, *Maya ICT* | İstanbul

May 2013 – September 2013

- Contributed to the development of .NET project modules using **C#, MVC, ADO.NET**, and **Entity Framework**.
- Supported team in bug fixing, code refactoring, and system documentation for enterprise applications

DİGİTAL MEDIA SPECIALİST, *Penta* | İstanbul

September 2012 – May 2013

- Managed digital marketing campaigns, created promotional content, and designed cross-platform visual assets.
- Analyzed engagement metrics and optimized content strategies for improved online visibility.

PROJECTS

Smart Warehouse Management System (R&D Project – MEF University BAP)

Role: Lead Full Stack Developer & Research Assistant

Duration: February 2025 – Present

An R&D-focused BLE beacon-based smart logistics solution developed within Mindsane and officially supported by MEF University under its **Scientific Research Projects (BAP)** program.

- Designed and implemented an **AI-integrated Smart Warehouse Management System** using **.NET Core 8, Web API, and SignalR** for real-time data communication.
- Developed system architecture integrating **BLE beacons** and **IoT-based localization algorithms**, enabling asset tracking and digital twin simulation.
- Applied **SCOR-based performance analysis** to optimize warehouse logistics and resource allocation.
- Prepared **TÜBİTAK 1507 grant documentation**, including SWOT, PESTEL, and technical feasibility analyses.

Technologies: NET Core 8, Web API, SignalR, Python, Scikit-learn, Gemini API, BLE Beacon, PostgreSQL, Docker, Azure BLE Beacon, SCOR Model, Angular

AiNA – AI-Powered Speech & Articulation Analysis Assistant

Role: Team Lead & Full Stack AI Developer

Duration: November 2024 – Present

Initiated during the **Up School AI Developer Certification Program** and developed with **guidance from academic experts**.

- Developed an AI-based prototype that analyzes children's speech to detect articulation disorders using **Gemini API** and **Python Flask backend**.
- Integrated real-time analysis and ROC-based evaluation to enhance model accuracy and performance monitoring.
- Designed **Flutter-based mobile interface** and **PostgreSQL database** for data collection, authentication, and result visualization.
- Conducted research on **ethical data collection, annotation standards**, and AI model evaluation for educational use.

Technologies: Python, Flask, Flutter, Gemini AI, AWS, PostgreSQL, MSSQL, Django, Wagtail

E-Commerce Platform (Microservices Architecture)

Role: Backend Developer

Duration: August 2024 – October 2024

- Developed a **scalable microservices-based e-commerce platform** integrating modules for product management, authentication, and order processing.
- Implemented **SignalR** for real-time notifications and **Identity Server** for secure authentication.
- Deployed containerized services using **Docker** and conducted API testing via **Postman & Swagger**.
- Improved transaction efficiency and scalability across distributed services.

Technologies: .NET Core, Web API, MSSQL, MongoDB, Redis, RabbitMQ, Docker, Onion Architecture, Identity Server, SignalR

EDUCATION

Işık University, Bachelor's Degree In Management Information Systems (Full Scholarship)

Istanbul, Turkey | 2020 – 2023

University Of Vienna – Bachelor's Degree In Computer Engineering (Incomplete Program)

Vienna, Austria | 2013 - 2017

Istanbul Commerce University – Associate Degree In Computer Programming (Full Scholarship)

Istanbul, Turkey | 2009 – 2012

CERTIFICATIONS

Full Stack .Net Software Expertise – M&Y Software Academy | 250 Hours, 2024

- Advanced training in **Asp.Net Core, Web Api, Entity Framework, MongoDB, Linq, Docker, SignalR, And Microservice Architecture**.

AI Developer Program – Up School & Ford Otosan “Gelecek Hayalim” Project | 2024

- Specialized training on **AI model development, Python, Gemini API integration**, and **AI ethics** in education-focused applications.

Software (Mcsd) Training - Bilişim Education Center | 800 Hours, 2017

- Microsoft Certified Solutions Developer (Mcsd)-Aligned Curriculum Covering **C#, Asp.Net Mvc, Ado.Net, And Web Services**.

Software And Database Expertise - Bilgeadam Academy | 300 Hours, 2013

- Intensive coursework on **SQL Server, T-SQL, ADO.NET, Windows Forms**, and **Entity Framework**.

LANGUAGES

English - Intermediate (B1)

German – Upper-Intermediate (B2 / Ösd Certified, License No: B2md1500857)