Emre YILDIZ

Software Architect and Engineering Lead

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Summary

Software Architect with 7+ years leading development of enterprise applications serving 100,000+ users across multiple industries. Architected 15+ microservices systems, reducing deployment time by 60% and improving system reliability to 99.9% uptime. Led cross-functional teams of 20+ engineers while delivering solutions that generated \$5M+ in revenue for B2B clients. Modernized legacy systems achieving 40% performance improvement and 50% reduction in operational costs.

Work Experience

Software Engineer

2025 - Present

ChessDuello Software Technologies Corporation

Remote

Remote

- Engineered iOS/macOS chess application achieving 4.8-star rating through unique trivia-based gameplay mechanics
- Constructed Supabase backend using Deno 2 Edge Functions, Hono framework, and Drizzle ORM
- Established live multiplayer system leveraging WebSocket channels for instant match synchronization
- Designed 8-phase match architecture supporting 100+ concurrent tournaments and reducing matchmaking time by 60%
- Developed robust API layer featuring offline queue, automatic retry logic, and response caching

Founder and Software Engineer

2025 - Present

Medivizi
 Built multi-tenant Occupational Health and Safety (OHS) platform leveraging Rust and Axum framework

- Deployed Row-Level Security (RLS) ensuring tenant isolation through PostgreSQL and SQLx compile-time validation
- Integrated live communication features via WebSocket support and S3-compatible storage powered by Garage
- Crafted admin dashboard using HTMX, Askama templates, and TailwindCSS for seamless user experience
- Structured database architecture supporting appointments, training workflows, and safety compliance tracking

Tech Lead 2023 – 2024

BergX Software Remote

- Led technical decisions and architecture design for 5+ enterprise projects serving 10,000+ users
- Mentored 8 team members and conducted 100+ code reviews, improving code quality by 40%
- Managed project timelines and technical deliverables with 95% on-time delivery rate

Software Engineer 2021 – 2023

Gunkom Software

Remote

- Upgraded company core boilerplate framework to .NET Core 6.0, improving performance by 30%
- Delivered 12 enterprise-level applications for Fortune 500 clients generating \$3M+ annual revenue
- Automated development workflows using Python, cutting setup time by 70% (from 2 hours to 35 minutes)
- Added REST API endpoints for workflow management system handling 65,000+ flows

Senior Software Engineer

Freelance / Contract

2017 - Present

Remote

- Delivered B2B e-commerce solution leveraging Angular and ABP .NET for major fashion retailers
- Launched blockchain analytics platform powered by NextJS and React Native
- Orchestrated NestJS microservice architecture enabling seamless third-party integrations
- Launched enterprise Flutter app achieving 20,000+ downloads and 4.5-star rating across app stores
- Extended Swift iOS capabilities for enterprise iPad application featuring custom keyboard for product ordering
- Engineered NFC payment solution processing \$500K+ monthly transactions with zero security incidents
- Created NestJS boilerplate adopted by 15+ projects, reducing development time by 40% per project

Instructor 2017 - Present

Betul Cemre YILDIZ Chess and Robotic Organization

Izmir, Turkey

- Teaching C# programming and Linux administration to 200+ high school students annually
- Conducting drone certification courses with 90% student pass rate

Education

Ege UniversityMaster of Science in Computer Engineering; Concentration: Distributed Systems
Jzmir, Turkey
2024 - 2026

Celal Bayar University

Manisa, Turkey

Bachelor of Science in Computer Engineering; GPA: 3.32/4.00

Ahmet Yassawi University Turkestan, Kazakhstan

Bachelor of Science in Computer Engineering; GPA: 3.81/4.00

2019 - 2022

Dokuz Eylul University

Izmir, Turkey

Associate's Degree in Computer Programming; GPA: 3.40/4.00

2016 - 2018

2020 - 2024

Technical Skills

Languages:

• C#, TypeScript, JavaScript, Python, Java, Rust, Solidity, Swift, Dart, SQL, Bash

Backend:

.NET Core, ASP.NET, Entity Framework, NestJS, Express, Django, FastAPI, Spring Boot, Axum

Frontend:

• Angular, React, NextJS, Vue.js, Redux, React Query, Tailwind CSS, Material-UI

Mobile:

• Flutter, React Native, Android (Java), iOS (Swift/UIKit)

Blockchain:

• Ethereum, Solidity, Web3.js, Hardhat, Foundry, ZkSync, Arbitrum, Aptos, Sui

Databases:

• PostgreSQL, MySQL, MSSQL, Redis, MongoDB, CouchDB

Cloud/DevOps:

AWS, Docker, Kubernetes, CI/CD, Linux, Nginx, HAProxy, Git, GitHub Actions

Architecture:

• Microservices, REST API, GraphQL, gRPC, RabbitMQ, Kafka, Event-Driven Design

ΔΙ/ΜΙ

• LangChain, Pydantic AI, pgvector, n8n, MCP Protocol, TensorFlow, PyTorch

Tools:

Agile/Scrum, Jira, Confluence, Selenium, Puppeteer, Postman, VS Code, IntelliJ IDEA

Projects

ChessDuello - Multiplayer Chess Game

2025 | SwiftUI, Supabase, Deno 2, PostgreSQL, WebSocket

- · Launched iOS/macOS chess application reaching 5,000+ active users through innovative trivia-based gameplay
- Enabled live multiplayer matches featuring 3-minute rounds and 24-hour response windows
- · Constructed scalable backend utilizing Edge Functions, service layer pattern, and Row-Level Security

Medivizi - OHS Management Platform

2025 | Rust, Axum, PostgreSQL, HTMX, WebSocket

- Delivered multi-tenant SaaS solution supporting 50+ companies and 10,000+ employee records
- · Secured platform through compile-time SQL verification via SQLx and extensive RLS policies
- Enabled instant updates for appointments, training sessions, and safety compliance monitoring

Blockchain Web3 Application

2023 | NextJS, NestJS, MySQL, Solidity, Web3.js

- Deployed Web3 platform handling \$2M+ in token transactions maintaining 99.9% uptime
- Deployed smart contracts across Ethereum, ZkSync, and Arbitrum networks
- Engineered live market analysis engine analyzing 100,000+ data points daily

Enterprise Workflow Management System

2022 | .NET Core, Angular, PostgreSQL, REST API

Supported enterprise workflow system processing 65,000+ workflows for multiple companies

- Exposed REST API endpoints enabling workflow initialization and control
- Streamlined version control workflow reducing merge conflicts by 75% and deployment errors by 90%

Chess Course Management System

2021 | C#, .NET Core, MSSQL, Entity Framework

- Created educational platform monitoring 500+ students, boosting attendance reporting accuracy by 85%
- Automated grading workflows to evaluate 1,000+ submissions monthly
- Designed database schema for efficient data retrieval and reporting

BASE Programming Language

2021 | Python, Compiler Design | GitHub

- Designed custom programming language used by 200+ students learning compiler fundamentals
- Developed lexer, parser, and interpreter achieving 95% code coverage and 30ms average compilation time