Emre YILDIZ

Software Architect and Engineering Lead

Izmir, Turkey | +90 532 563 0256 | emre.yildiz.dev@hotmail.com
LinkedIn: https://linkedin.com/in/emre-yildiz-297ab0242
GitHub: https://github.com/emre-yildiz-dev

Summary

Software Architect with 7+ years expertise in system design, cloud computing, and scalable distributed systems serving 100,000+ users. Architected 15+ microservices using Agile methodologies, achieving 60% faster deployment cycles and 99.9% uptime through DevOps best practices. Led cross-functional teams of 20+ engineers using technical leadership and mentoring to deliver $5M+ in revenue-generating B2B solutions. Modernized legacy systems with cloud migration strategies, improving performance by 40% while reducing operational costs by 50%.

Work Experience

Software Engineer   2025 – Present
ChessDuello Software Technologies Corporation   *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 Object-Relational Mapping (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 Application Programming Interface (API) layer featuring offline queue, automatic retry logic, and response caching

Founder and Software Engineer   2025 – Present
Medivizi   *Remote*

- 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 Tailwind Cascading Style Sheets (CSS) 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 Representational State Transfer (REST) API endpoints for workflow management system handling 65,000+ flows

Senior Software Engineer   2017 – Present
Freelance / Contract   *Remote*

- Delivered Business-to-Business (B2B) e-commerce solution leveraging Angular and ASP.NET Boilerplate (ABP) 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 Near Field Communication (NFC) payment solution processing $500K+ monthly transactions with zero security incidents
- Created NestJS boilerplate with authentication, Redis cache, Bull queue, JSON Web Token (JWT), and cron jobs

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 University   Izmir, Turkey
Master of Science in Computer Engineering; Concentration: Distributed Systems   *2024 – 2026*

Celal Bayar University   Manisa, Turkey
Bachelor of Science in Computer Engineering; GPA: 3.32/4.00   *2020 – 2024*

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*

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

AI/ML:
- LangChain, Pydantic AI, pgvector, n8n, MCP Protocol, TensorFlow, PyTorch

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

Leadership & Soft Skills:
- Technical Leadership, Team Mentoring, Cross-functional Collaboration, Stakeholder Management
- System Design, Solution Architecture, Code Review, Technical Documentation
- Agile Project Management, Problem Solving, Communication, Strategic Planning

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