Emre YILDIZ

Software Architect & Engineering Lead

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Summary

Experienced Software Architect and Engineering Lead with 7+ years developing enterprise-scale applications. Strong expertise in full-stack development, microservices architecture, blockchain technologies, and cloud platforms. Proven track record of leading technical teams, upgrading legacy systems, and delivering high-performance solutions for B2B e-commerce, fintech, and Web3 applications. Passionate about innovative technology solutions and continuous learning.

Experience

Software Engineer 2025 – Present

ChessDuello Software Technologies Corporation

Remote

- Developed iOS/macOS chess application with SwiftUI featuring unique trivia-based gameplay mechanics
- Built Supabase backend with Deno 2 Edge Functions, Hono framework, and Drizzle ORM for PostgreSQL
- Implemented real-time multiplayer system with WebSocket channels for live match synchronization
- Designed complex match system with 8-phase architecture including AI bots and tournament support
- · Created comprehensive API layer with offline queue, automatic retry logic, and response caching

Founder & Software Engineer

2025 - Present

Medivizi Remote

- Architected multi-tenant Occupational Health and Safety (OHS) backend system using Rust with Axum framework
- Implemented Row-Level Security (RLS) for tenant isolation with PostgreSQL and SQLx compile-time checked queries
- Built real-time features with WebSocket support and S3-compatible storage using Garage
- Developed admin dashboard with HTMX, Askama templates, and TailwindCSS for seamless user experience
- Designed comprehensive database schema for appointments, training management, and safety compliance tracking

Tech Lead 2023 – 2024

BergX Software Remote

- Led technical decisions and architecture design for multiple projects
- Mentored team members and conducted code reviews
- Managed project timelines and technical deliverables

Software Engineer 2021 – 2023

Gunkom Software

- Upgraded company core boilerplate framework from .NET Core 3.1 to .NET Core 6.0
- Developed enterprise-level frontend and backend applications
- Implemented Python automation tools for development environment optimization
- Added REST API endpoints for workflow management system handling 65,000+ flows

Senior Software Engineer

2017 - Present

Remote

Freelance / Contract Remote

- Developed B2B e-commerce platform with Angular frontend and ABP .NET backend for Altinyildiz Classics & Beymen Business
- Created blockchain analysis web and mobile applications using NextJS, React Native, and NestJS microservices (irkripto.com)
- Built enterprise Flutter mobile app for customer-welder portal deployed to PlayStore and AppleStore (Magmaweld)
- Implemented Swift iOS features for enterprise iPad application including custom keyboard for product ordering
- Developed NFC payment Android application with Java and bank gateway integration
- Created NestJS backend boilerplate with authentication, Redis cache, Bull queue, JWT, and cron jobs

Instructor 2017 - Present

Betul Cemre YILDIZ Chess and Robotic Organization

Izmir, Turkey

- Teaching C# programming and Linux administration to high school students
- Conducting drone certification courses

Education

Ege University Izmir, Turkey Master of Science in Computer Engineering; Concentration: Distributed Systems 2024 - 2026 **Celal Bayar University** Manisa, Turkey 2020 - 2024 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 Technical Skills Languages: C#, TypeScript, JavaScript, Python, Java, Rust, Solidity, Swift, Dart, SQL, Bash Backend: .NET Core, ASP.NET, Entity Framework, NestJS, Express, Diango, 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 **Projects** 2023 Blockchain Web3 Application | NextJS, NestJS, MySQL, Solidity, Web3.js Developed full-stack Web3 application for token transactions and market bot management Implemented smart contracts on Ethereum, ZkSync, and Arbitrum networks Built real-time market analysis features with automated trading capabilities 2022 Enterprise Workflow Management System | .NET Core, Angular, PostgreSQL, REST API • Supported enterprise workflow system processing 65,000+ workflows for multiple companies Implemented REST API endpoints for workflow initialization and management Organized version control system and implemented new features with bug fixes 2021 Chess Course Management System | C#, .NET Core, MSSQL, Entity Framework Built comprehensive web application for student progress tracking and attendance management Implemented chess puzzle homework submission and automated grading system Designed database schema for efficient data retrieval and reporting **BASE Programming Language** | Python, Compiler Design | GitHub 2021 Designed and implemented custom programming language with Python interpreter

· Developed lexer, parser, and interpreter components following compiler design principles