

# Ferhat Balaban

## AI Engineer · Software Development Manager · CTO

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Software engineer of 20+ years, the last decade spent leading engineering teams. I led the customer services platform team at Turkcell, headed development of products reaching millions of users at E-Veri Bilişim, including Turkcell Müzik (Fizy) and Hürriyet e-Gazete, and spent more than ten years as CTO at Açık Deniz Bilişim, owning the architecture and the engineering organisation behind enterprise B2B products: ERP/CRM integrations, end-to-end encrypted communication, and Flutter and native mobile solutions for FMCG field teams. In the same period I established and ran the company's ISO/IEC 27001 information security management system through to certification.

I don't treat management as a desk job: I stay close to architecture decisions, read code, and still write it when it matters. In recent years my focus has shifted to applied AI: LLM-based assistants, RAG architectures and autonomous agent systems. I'm looking for engineering leadership roles where I can grow a team building products at scale and bring AI into production systems for real.

## CORE COMPETENCİES

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|---|---|
| **Leadership** | Engineering management · Team building & hiring · Architecture ownership · Agile / Scrum / Kanban · SDLC · Technical mentoring |
| **Languages** | Dart/Flutter · Java · Kotlin · Swift · Python · PHP/Laravel · TypeScript / JavaScript (React, Vue.js) · .NET/C# |
| **AI & ML** | Generative AI · LLM integration (Claude, GPT, DeepSeek) · Agentic AI / Multi-agent orchestration · MCP · Prompt engineering · RAG (Retrieval-Augmented Generation) · Speech-to-text / text-to-speech · Machine Learning (XGBoost, gradient boosting, logistic regression, time-series analysis) |
| **Backend & Data** | REST API design · MySQL · Oracle · PostgreSQL · AWS (EC2) · High-traffic backend architecture |
| **Web3** | Solidity · Polygon / EVM · ERC-20, ERC-721/1155 (NFT & token) · Wallet integration · DAO mechanics |
| **Game** | Unity · Real-time multiplayer (MMORPG-style) · Procedural world generation · In-game NFT/token integration |
| **Practices** | DevOps · CI/CD · ISO/IEC 27001 ISMS · Information security · Code review culture |

## PROFESSİONAL EXPERİENCE

### Founder & Lead AI Engineer
May 2026 – Present

KaiMoi · İstanbul / Remote

- Founded and built a portable AI agent + backend product shipped to real customers via a self-service install flow (clone, configure, migrate, watchdog).
- Designed an extensible multi-agent runtime that can compose any number of specialist agents, shipping by default with two roles: Kai (autonomous developer) and Moi (reviewer / orchestrator), with cost-aware routing across DeepSeek, Claude and Anthropic API providers. Powered by Cogentic, our in-house multi-agent orchestration framework, also maintained as open source (see Personal Projects).
- Built a CRM-integrated backend (on SuiteCRM) and a fully automated per-project deploy and health-check pipeline.
- Stack: Python 3.11+ (stdlib-only core: urllib, http.server, sqlite3), MCP server, multi-provider LLM routing (DeepSeek, Claude, OpenAI, local models via llama.cpp).

### Founder & Lead AI Engineer
Jan 2026 – Present

DoktorAsistan · İstanbul / Remote

- Founded and built an AI-powered patient–doctor communication platform end to end: architecture, backend, web, mobile and AI.
- Designed LLM-based systems for automated medical Q&A, AI content generation and assistant workflows using prompt engineering and RAG.
- Implemented multi-channel patient and doctor notifications, automated mail pipelines, CRM enrichment and analytics.
- Stack: PHP/Laravel, Python, MySQL, Flutter and Claude/GPT/DeepSeek APIs, with a focus on scalable, automated, production-grade delivery.

### CTO
Jun 2015 – Jan 2026

Açık Deniz Bilişim · İstanbul

- Owned architecture and the engineering organisation for enterprise B2B products: ERP, CRM, end-to-end encrypted communication, and secure file storage and sharing.
- Led Siper (siperiletisim.com) end to end — a self-hosted, end-to-end encrypted corporate messaging and conferencing platform for Android, iOS, Windows, macOS and Linux (Pardus-compatible): clients built entirely from scratch in Java and Swift on the Signal protocol, a custom backend built on Openfire in Java, and a TypeScript web client; directory integration, 2FA and AI-assisted attack detection; passed ISO/IEC 27001 and independent UITSEC penetration testing.
- Built FMCG field-force mobile applications with Flutter, native Android (Java) and iOS (Swift), integrated with ERP systems for distributor and customer data access.
- Delivered task and activity management, survey execution and photo/location-based field reporting used daily by sales representatives.
- Established and led the company's ISO/IEC 27001:2013 information security management system through to successful certification by Kiwa, a TÜRKAK-accredited body.

### Software Development Manager
Aug 2008 – Jun 2015

E-Veri Bilişim · İstanbul

- Led teams delivering e-commerce, native mobile and web applications on PHP and .NET backends with Java and Swift on mobile.
- Spearheaded widely adopted products including Turkcell Müzik (Fizy), Hürriyet e-Gazete, Mikro Accounting Mobile and an FMCG customer survey app.
- Directed location and map-based applications and the web admin panels supporting the mobile portfolio.

### Development Team Lead / Senior Software Developer
Aug 2002 – Jul 2008

Turkcell · İstanbul

- Led the Customer Services development team building a Java-based customer service platform.
- Served as technical lead on a TÜBİTAK R&D project; developed Java middleware and Oracle-backed enterprise applications.

### Java Software Engineer
Aug 2000 – Aug 2003

Anadolu Sigorta · İstanbul

- Developed insurance software in Java.

## PERSONAL PROJECTS

**Cogentic** — Creator & Maintainer · Open source, spun out of KaiMoi · May 2026 – Present

Cooperative runtime for multi-agent AI systems ("co + agentic"): agents that review each other and keep a human in the loop. Cost-aware auto-routing across DeepSeek, Claude, GPT-4o, Gemini and local models; an SQLite spend ledger with warn and hard-stop thresholds; delegation to sub-agents under runtime-level tool permissions; and persistent agent memory across sessions. Ships as a terminal REPL, a browser dashboard and an MCP server for Claude Code, Cursor and Zed. You define the agent roles and the org chart yourself: it ships with an operator and a supervisor, but any structure can be composed: specialists that split the work, review each other and escalate up the chain, to another agent or a human, depending on how the org chart is wired. Python 3.11+, MIT licence, stdlib-only core.

**Algorithmic ML Trading** — Founder & ML Engineer · Personal project · Jul 2021 – Present

Multi-account algorithmic trading platform for financial markets, built and operated end-to-end (data pipeline → strategy engine → live execution → backtesting), running 24/7 on AWS with self-healing process orchestration across 8 master + 32 player processes. Real-time market-data pipeline computing technical indicators (RSI, MACD, ATR, OBV) feeding a rule-based decision engine with dynamic, drawdown-aware position sizing. ML layer for trade filtering: an online logistic regression model retraining continuously on closed trades, plus XGBoost and custom gradient-boosted-trees classifiers validated with walk-forward cross-validation (12 folds / 6 months) before rollout. Backtesting framework with intrabar execution and transaction costs, validated across 50+ documented experiments before each deployment. Stack: Node.js, MySQL, PM2, AWS, XGBoost, logistic regression, gradient boosting.

**GhoVerse / Web3 Academy** — Founder · Jan 2023 – Apr 2024

Blockchain-enabled MMORPG-style multiplayer game demo on Polygon, developed as a project-based venture: designed and implemented the ERC-20 token (fixed supply, burn and staking/reward mechanics) and NFT collections, including a 10,000-piece first generation listed on OpenSea and Rarible plus character and planet NFTs used in-game. Integrated the wallet, smart contracts and token economy with Unity-based game mechanics; built real-time multiplayer and a procedurally generated world. Founded Web3 Academy, a DAO for web3 and blockchain education (blockchain, metaverse, NFTs, coins, tokens, smart contracts and more), building collaborative learning and project participation.

## CERTİFİCATİON

### ISO/IEC 27001:2013 · Information Security Management System

Kiwa Belgelendirme Hizmetleri A.Ş. (TÜRKAK-accredited) · Certificate No. M 11005 · First certified June 2018

Scope: software development and the installation, backup, operation and technical support of the resulting products. Led the programme end to end: risk assessment, Statement of Applicability, policies, internal audits, corrective actions and the external certification audit.

## EDUCATİON

**B.Sc. Computer Engineering (English)**
Marmara University · 1995 – 2000 · GPA 4.02 / 5

**Science High School**
Toros Fen Lisesi, Mersin · 1995

## LANGUAGES

Turkish: native · English: full professional proficiency · German: beginner