

Mohammadreza (Reza) Heidari

Istanbul, Turkey | heidari.io | reza@heidari.io | mheidari988@gmail.com | linkedin.com/in/mohy | github.com/mheidari988

Summary

Backend/architecture lead specializing in .NET (Framework/Core 2.1-10), Clean Architecture, CQRS/MediatR, cloud-native delivery (Azure, Docker/Kubernetes, Linux), and deterministic trading/research systems. Built multi-tenant platforms, AI-powered nutrition analytics, healthcare integrations, fintech, insurance, hardware-kiosk systems, and personal MT5/.NET algorithmic trading platforms. Strengths: domain-driven modeling, security/audit pipelines, resilient integrations (OpenAI, SAP, hospital APIs, banks), and pragmatic DevOps (CI/CD with GitHub Actions/GitLab CI).

Core Skills

- **Languages/Frameworks:** C#, MQL5, .NET 10/9/8/7/4.x, ASP.NET Core (Minimal APIs, MVC), ABP/ASP.NET Zero, Web Forms, WinForms, Next.js 15 (app router), React, Tailwind, HeroUI.
- **Architecture:** Clean Architecture, CQRS + MediatR, microservices/service-oriented design, domain events, EF Core/EF6, Identity/JWT/Clerk, Hangfire/background jobs, messaging/queues (RabbitMQ), SSE/Webhooks.
- **Data/Infra & DevOps:** SQL Server, PostgreSQL, Redis, Azure SQL/Blob/Key Vault, Elasticsearch, Azure App Service, Docker, Kubernetes, Linux (Ubuntu), Nginx, CI/CD (GitHub Actions, GitLab CI), Testcontainers/NUnit.
- **Integrations:** OpenAI (structured outputs / JSON Schema), SAP, bank/SMS/FTP/SOAP/HTTP, Modbus TCP, Google/YouTube, Payfull, CRM, Assistbox video calls.
- **AI-assisted development:** ChatGPT, OpenAI Codex, GitHub Copilot.
- **Tooling/UX:** AutoMapper, FluentValidation, Serilog/NLog, Refit/HttpClient, ffmpeg, CefSharp, WIA, PdfiumViewer, Kendo UI, localization/timezone handling.

Experience

Arneca Technologies - Senior .NET Developer / Backend Architect (Jun 2022 - Present; Client Projects)

Delivering client projects across sustainability, fintech, merchant operations, healthcare, remote software delivery, and insurance while working with Arneca Technologies.

Project: Decarbonia - Backend Architect (Clean Architecture, .NET 9)

- Architected a multi-tenant Clean Architecture backend (.NET 9) with CQRS/MediatR pipelines and EF Core interceptors for auditing, history tracking, soft delete, and domain-event dispatch.
- Designed a strategy-based corporate action engine (mergers/divestitures/JVs/hierarchy changes) to keep complex business variations additive and testable.
- Delivered metadata-driven APIs (dynamic grids, schema/enum discovery, consistent envelopes) plus integrations (Azure SQL/Blob, OpenAI, SendGrid/Twilio, Google geocoding) and CI/CD to Azure App Service.

Project: Onsa Rafineri A.S. - Senior .NET Developer (.NET Framework 4.7.2)

- Delivered OTP-gated JWT Web API/MVC stack for jeweler tablets, back-office ops, and bank settlements on .NET Framework 4.7.2; EF6 DB-first over shared SQL Server.
- Integrated multiple banks and services via REST/SOAP, SMS OTP, KPS identity checks, and file uploads, persisting request/response traffic for auditability.
- Built Windows services for bank token refresh and Exchange email dispatch; standardized JWT validation via a DelegatingHandler and reusable HTTP/SOAP helpers.

Project: VeriSoft - Senior .NET Developer

- Built kiosk-grade WinForms client (CefSharp) that bridged portal JavaScript to peripherals (camera/scanner/printer), with ffmpeg transcoding and resumable FTP uploads + integrity checks.
- Delivered ASP.NET MVC 5 backoffice with Castle Windsor DI, Kendo UI, FluentValidation, and EF6 repository/UoW patterns for merchant onboarding and operations.
- Hardened deployments with offline advert caching + sync, self-update/restart, disk-space/single-instance guards, TLS enforcement, and NWebsec security headers.

Project: Memorial Healthcare Group - Senior .NET Developer

- Led integration-heavy backend surfaces across public web/mobile platforms, orchestrating CMS content, hospital appointment/e-result APIs, CRM, payments (Payfull), Assistbox video visits, and Elasticsearch-backed search.
- Built .NET 7 CQRS/MediatR APIs for memorial.ro with JWT, rate limiting, Hangfire indexing jobs, FluentValidation + reCAPTCHA, and PII-safe logging (hashing/sanitization).
- Architected ASP.NET Core 3.1 hospital middleware unifying Bilmed/Pusula/SAP/IYS/MobilDev with tenant-aware gateways, cached ID mappings, OTP login, consent versioning, and full outbound call logging for forensics.
- Delivered patient-facing appointment/e-result facade (ASP.NET Core 2.1) with encrypted cookies, strict input hygiene, throttling, and hardened middleware (HSTS, cookie shields, suspicious-path blocking).

Project: ampicade - Senior .NET Developer

- Shipped maintainable C#/.NET changes end-to-end (design -> implementation -> debugging -> release support) with a focus on clean, testable code.
- Contributed to team delivery through proactive communication, problem-solving, and a strong quality mindset.

Project: Cleverpace - Backend Lead (Insurance platform, ABP/ASP.NET Zero, .NET 6)

- Led backend on ABP/ASP.NET Zero (.NET 6, PostgreSQL) using modular layering, multi-tenancy, auditing, and edition/feature gating; exposed SignalR/GraphQL surfaces where needed.
- Built resilient integrations to insurer calculators (EFM/FB), payments (Stripe/PayPal), storage (S3/Azure), and messaging (Twilio) with Refit + Polly clients and scheduled background sync workers.
- Hardened auth and operability with JWT + refresh, 2FA/captcha, impersonation/delegation, Serilog -> Loki, health checks, migrations CLI, and Docker/k8s deployments via GitLab CI.

CleanArchitecture.Extensions - *Personal Project* (Creator & Maintainer; NuGet ecosystem, .NET 10)

Early-stage open-source NuGet ecosystem extending Jason Taylor's Clean Architecture template without forking it; actively developing enterprise-grade primitives and cross-cutting behaviors.

- Built plug-and-play MediatR behaviors for correlation/trace propagation, structured logging + performance thresholds, FluentValidation strategies, and catalog-driven exception mapping with redaction/PII-safe errors.
- Implemented read-side caching primitives: deterministic cache keys with namespace/tenant scoping, in-memory + IDistributedCache adapters, cache-aside GetOrAdd, and stampede protection with jittered expirations.
- Authored core primitives (Result/Result<T>, guard clauses, IClock, EF Core domain-event dispatch interceptor) and shipped packages with docs/samples, SourceLink/symbols, CodeQL, and automated CI/CD publishing.

FiberFits - *Personal Project* (Backend & Frontend Lead; OpenAI nutrition, Next.js 15 + .NET 9)

Nutrition/fitness platform where members log meals (text/photo) and get AI nutrition analysis plus maintenance-energy planning and insights.

- Led Clean Architecture API delivery (.NET 9) with Clerk JWT auth, EF Core (SQL Server), config-as-data, and an async OpenAI nutrition pipeline (channel queue + worker + JSON Schema outputs) with SSE streaming.

- Modeled MealEntry lifecycle, energy planning, and nutrition goals using domain invariants (unit normalization, rowversion concurrency, safe reprocessing).
- Built Next.js 15 app-router UI with HeroUI/Tailwind, next-intl locale/timezone resolution, Clerk middleware, typed API clients, and SSE hooks for real-time analysis updates.
- Improved reliability and UX with image compression, optimistic updates + localStorage fallbacks, staged progress overlays, and Docker-based Linux deployments (Cloudflare -> Nginx -> Docker Compose) with CI for lint/type-check/build.

MOHY MT5 Trading Algorithm - Personal Project (MQL5, MetaTrader 5)

Deterministic multi-timeframe continuation trading-system workspace for MT5, focused on kernel-owned strategy facts, EA runtime state, visualization, portfolio scanning, and verification discipline.

- Built MQL5 price-action kernel contracts/builders for candles, pivots, elements, legs, Swing3 semantics, potential impulses/corrections, continuation signals, trade setup plans, and historical setup replay.
- Implemented EA runtime concepts for virtual triggers, real pending orders, risk/exposure gating, one-trade-per-impulse controls, break-even, trailing, partial exits, hybrid management, lifecycle persistence, and restart-aware recovery.
- Added read-only visualizer and portfolio scanner flows with deterministic buckets/ranking, operator controls, audit trails, JSON/CSV runtime artifacts, compile gates, matrix verifiers, and determinism/lifecycle parity checks.

MOHY Platform - Personal Project (.NET 10 Trading Research Platform)

Contract-first C# platform program translating the MT5 strategy into a .NET engine, replay/backtesting stack, research factory, schemas, adapter boundaries, and analytics groundwork.

- Designed a hexagonal .NET 10 architecture with shared contracts, engine-core services, adapter SDK boundaries, market-data ingestion, research-factory services, JSON Schema governance, curated samples, and phase/ADR documentation.
- Implemented deterministic services for market-data replay/certification, setup planning, risk gates, execution simulation, order/lifecycle/ledger semantics, break-even/post-entry management, restart recovery, and reconnect reconciliation.
- Built Dukascopy-first historical ingestion, backtest/campaign/experiment catalog workflows, benchmark and promotion reports, analytics report-pack validation, and xUnit coverage across data, runtime, simulation, risk, research, and analytics slices.

MAT biomedical - Senior .NET Developer (Contract; Jan 2021 - May 2022)

Browser HMI for a hydrotherapy treadmill (Aquamill), bridging AJAX calls to Modbus TCP PLC control of speed/programs/pumps/heater/lighting.

- Built ASP.NET Web Forms HMI that bridged browser AJAX calls to Modbus TCP PLC control for hydrotherapy treadmill programs and peripherals.
- Implemented 100 ms polling, press-and-hold safety UX, and XML-persisted presets/ratios; bundled EasyModbus stack and diagnostics tooling.
- Delivered on-prem deployment with minimal dependencies, explicitly documenting trusted-network assumptions and security trade-offs.

Negin Nassaj Asia (Senatex) - Full Stack Developer (Full-time; Apr 2015 - Oct 2020)

Textile spare parts catalog portal and internal tooling (legacy ASP.NET Web Forms + WinForms, SQL Server).

- Delivered and maintained a searchable spare-parts catalog (Web Forms + SQL Server) with part detail pages, admin CRUD, and basic validation.

- Built WinForms utilities for day-to-day catalog operations (data entry/updates, image management, exports/reports).
- Owned deployments and operations (IIS/VPS publishing, DNS, backups) and handled office IT/network basics as the primary point of contact.

Atra Dade Pardaz - *.NET Developer* (Full-time; Jul 2013 - Apr 2015)

Windows Service that automated server-side handling and publishing of image/video files for web properties.

- Built a reliable .NET Framework 4.5 Windows Service to ingest, process, and deploy media assets (images/videos) to server environments.
- Implemented IO-heavy pipelines (validation, transforms, retries) and persisted job/status tracking using SQL Server + T-SQL.
- Supported a mixed web stack (ASP.NET + WordPress/static sites) and on-prem operations (Windows Server/IIS).

Education & Certifications

- **RU102N:** Redis for .NET Developers - Redis University (2023)
- Certificate in Information Systems Management - Aptech Worldwide, Tabriz, Iran (Oct 2008; Distinction)
- Professional Certificate in Visual Basic Programming - Iran (2006)
- Vocational Diploma of Computer Science - Tabriz, Iran (2006)