

HÉCTOR ANTRUEJO

Senior .NET Software Engineer | Application and Platform Architecture | AWS and AI agents

hector.antruejo@gmail.com • linkedin.com/in/hector-antruejo1

PROFESSIONAL PROFILE

Senior .NET Software Engineer: since 2017 I analyze with the client, design and build platforms, integrations and my own products. Right now: modernization of critical systems to .NET and Blazor, data layer portability across engines, observability over several hundred hosts, and technical project management with direct client contact. I integrate AI agents (Claude Code, Codex) across the whole development cycle on an in-house harness —a framework that splits the work among role-based subagents, backs them with MCP servers and measures their cost— with technical judgment and validation always mine.

KEY SKILLS

Backend	C#, .NET / ASP.NET Core, Entity Framework, REST APIs, WebSockets
AI agents	Claude Code and Codex across the whole development cycle; in-house agent-agnostic harness, in-house MCP (Model Context Protocol) servers, subagents by role and model, context engineering and cost measurement
Frontend	Blazor Server, JavaScript, TypeScript, SCSS / CSS, responsive UI
AWS Cloud	Solutions architecture, AWS CDK (IaC), Lambda, serverless, cost optimization
Data	SQL Server, Oracle, PostgreSQL, MySQL / MariaDB, MongoDB
Security and delivery	Docker and Compose, image registry, Linux server administration (nginx, TLS), IAM and networking on AWS, secrets management, authentication and authorization, GDPR
Platform	Git, observability (Serilog, Filebeat, Graylog, OpenSearch), Zabbix monitoring
Quality	Functional and load testing, E2E with Playwright, browser console error monitoring
Project management	Direct client contact, requirements gathering and functional analysis, weekly follow-up with status board, liaison with manufacturers and system owners, delivery risk management
Methods	Scrum, Jira, written and measured delivery procedures, Clean Architecture, SOLID

WORK EXPERIENCE

.NET Developer • technical project management • Redytel

Apr 2025 — Present

.NET solutions for the iTuc systems, in the healthcare domain: legacy service modernization, technical project management with direct client contact, and improving the architecture, quality and maintainability of critical applications.

- Integration of AI agents (Claude Code, Codex) across the whole development cycle —analysis and planning, testing, implementation, code review, release and diagnosis— through an in-house, agent-agnostic harness: a framework that splits the work among subagents by role and model, backs them with in-house MCP (Model Context Protocol) servers and measures the cost of each run. Its procedures are improved through measurement: more efficiency and software quality with the same or lower token consumption (8% to 52% lower cost in the sessions measured), with technical judgment and validation always mine.
- Team technical lead: AI development methodology adopted by the team, supervision of two final-year degree projects, a development plan for junior engineers and weekly project reviews with written minutes.
- Technical management of the projects with direct client contact: requirements gathering and functional analysis, solution proposal, weekly follow-up with a status board and delivery risks, and liaison with manufacturers and system owners through to go-live.
- Progressive migration of services from .NET Framework to .NET / .NET Core, cross-platform on Windows and Linux (x86 and ARM), and evolution of web applications toward Blazor components with SOLID and Clean Architecture; removal of legacy data access from the core, with a suite of 218 tests across four engines and 38% less time reading queues.
- Data layer adaptation to run on PostgreSQL and MySQL as well as Oracle; historical storage of high-volume data in MongoDB (1.2 million documents a day) after a benchmark of four engines.
- Centralized observability and log tracking platform for all deployed services (Serilog, Filebeat, Graylog migrated to OpenSearch: 47 GB and 16 indexes with no loss; Zabbix across several hundred hosts), linked to AI agents for analysis, monitoring and detection of patterns and improvements in the products.

- Security diagnostics and critical fixes in the products: identity spoofing in fraudulent logins, reconstructed from traces, and restriction of access to system files through malicious links.
- Functional and load tests from scratch and E2E suites with Playwright, with browser console error monitoring across the whole suite.
- Containerization of the services with Docker and Compose, images in a private registry and deployment across clients, with secrets kept out of the code, application authentication and authorization and technical validation during rollout.

Stack: C# · .NET Core · ASP.NET Core · Blazor Server · Entity Framework · Oracle · PostgreSQL · MySQL / MariaDB · MongoDB · Docker · Serilog · Graylog · OpenSearch · Filebeat · Zabbix · Playwright · Git · Scrum

Systems Analyst · cloud and project management · Aindeep Technology Solutions

Mar 2021 — Apr 2025

Technical development and delivery of cloud solutions and platforms for clients, combining AWS architecture, operational automation, backend work, ecommerce, and mobile applications.

- Self-initiated Blazor Server tool to inventory volumes, snapshots and orphaned or unused resources, with a **measured 25% saving on a client's daily infrastructure spend** (from €165 to €124 a day in one year) after removing more than a thousand AMIs, snapshots and volumes.
- Infrastructure migration for a private clinic: on-premise data and data moved between AWS organizations, backups, active directories, load balancers, autoscaling, EC2 instances and Lambda functions.
- Client infrastructure as code with TypeScript and AWS CDK; new infrastructure for a training platform (CloudFront, RDS, CloudFormation) validated with load tests and delivered in five months; monitoring with Prometheus, Grafana and SNS alerts.
- Security of client infrastructures: least-privilege IAM policies, networking and security groups on AWS, web server hardening (TLS, headers, restricted access), secrets management, and handling of personal data in line with the GDPR.
- WordPress and Magento websites and WooCommerce ecommerce on scalable AWS infrastructure, PHP plugins and Python lambdas to automate purchases and user onboarding; Scrum-oriented Jira platforms and operational automation with Power Automate.
- Real-time mobile game with Node.js backend on AWS; modernization of a Node.js application unused for over four years with TypeScript and unit and load tests; supervision of an Ionic/Angular app deployed to Android and iOS.

Stack: AWS · AWS CDK · Lambda · CloudFormation · Prometheus · Grafana · TypeScript · Node.js · Python · Angular · Ionic · Blazor Server · Docker · MongoDB · Scrum · Jira

Co-founder · product, architecture and development · Saregames S.L.

Jan 2017 — Mar 2021

Creation and evolution of own products from scratch, with direct responsibility for technical decisions, product design, prioritization, architecture, and platform operations.

- Video game platform foundation with .NET Core servers and APIs prepared for scale, sharing users, data, and currencies across several games.
- In-house authentication and authorization for the accounts shared across games, payments with Stripe, and handling of personal data in line with the GDPR.
- Unity3D and Android games with real-time communication, coordinated caches and cascading notifications; dashboards to observe live matches and support daily operations, and internal websites on .NET.

Stack: .NET Core · .NET Framework · C# · REST · WCF · WebSockets · SQL Server · Unity3D · Android · Stripe · Caching · Scrum

EDUCATION AND TRAINING

Degree in Computer Engineering — Software Engineering

University of the Basque Country (UPV), San Sebastián (Spain)

Higher Diploma in Telecommunications and Computer Systems

Somorrostro Training Center, Muskiz (Spain)

AWS Certified Solutions Architect – Associate (2023, valid until April 2026)

AWS solution design, infrastructure as code, and cost, security, and operations criteria

Continuous technical training: AWS Certified Cloud Practitioner (2022) · PM² Advance course (2024) · Advanced C# and .NET Core · Blazor development · AWS CDK (IaC) · Scrum Master and agile methodologies

Languages: Spanish native · technical English (reading and writing documentation)