

Andrea Ritondale

· Andrea0x.eth

Principal Engineer · IT Architect · AI Builder · Hybrid Technical Founder

CONTACT

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LANGUAGES

Italian	Native
English	Fluent · C1/C2
Spanish	Intermediate · B1
Chinese	Basic · A2

EDUCATION

Professional Scrum Master I — Scrum.org
11/2022

Master's Degree in Management — University of Cassino and Southern Lazio (IT)
2020 – 10/2022

Erasmus+ — St. Kliment Sofia University (BG)
02/2020 – 07/2020

Blockchain Developer — Start2Impact
09/2020 – 03/2021

Blockchain Business — Dalian University of Technology (CN)
09/2019 – 12/2019

Bachelor's Degree in Economics — University of Cassino and Southern Lazio (IT)
29/01/2020

AVAILABLE FOR

Fractional / CTO-as-a-Service	€130–220/h
Technical Architect	€110–180/h
AI Engineering	€130–220/h
Database Performance Engineering	€90–150/h
Process Digitalization	€70–130/h
Web3 / Smart Contract Integration	€110–180/h

* Indicative rates · open to negotiation

PROFILE

Principal Engineer + IT Architect + AI Builder. I design, build and run complex IT systems end-to-end across multiple domains: AI engineering · multi-chain DeFi · production B2B pharma SaaS · Italian public sector (PNRR / cultural heritage).

CORE COMPETENCIES

Traditional Software Engineering

Senior+ full-stack with production ownership: I write specs, design the architecture, deploy and maintain.

TypeScript · React 19 · Next.js 15 · Node.js · Express

AI Engineering

I build production AI systems: agent loops with per-task tool whitelists, multi-tenant MCP gateways, custodial signing-services and code-level guardrails.

Single-loop agent · Per-task tool whitelist · MCP gateway · MCP-over-stdio · LLM integration

Cloud & DevOps

I run production infrastructure on GCP and DigitalOcean without a dedicated DevOps team.

GCP · Cloud Run · Cloud SQL · Secret Manager · DigitalOcean

Web3 / Blockchain

Multi-chain smart-contract integration (EVM + Algorand), ERC-4626 vaults, soulbound tokens (ARC-19 + ERC-5192), account abstraction, gasless UX.

ERC-4626 · EIP-7702 · ERC-7821 · ERC-721 · ERC-5192

IT Management & Digitalization

I orchestrate complex IT systems and turn traditional workflows into end-to-end digital flows.

Microservices · Vendor selection · Multi-team coordination · Process digitalization · Decision logs

Business Strategy

Revenue modeling, GTM, fundraising and business plans — tech with a founder mindset.

Excel modeling · SWOT · Cap table · Pitch deck · GTM strategy

EXPERIENCE

Founding Product Engineer & Technical Co-founder

01/2026 – Present

Mandate.Finance · Co-founder

Founding engineer of an AI-native DeFi platform: 11 workspaces (6 Cloud Run runtime services + Foundry contracts + infra + 2 Next.js 15 frontends + test harness + docs) in 5 weeks (~1,300 commits, ~140k LOC).

Solo CTO / Principal Engineer

07/2025 – Present

Haelias · Full Time

Solo CTO of a live B2B pharma SaaS (Montefarmaco, Logista SPA): 5.5M+ MongoDB documents, ~14k cross-supplier in-stock products, 143 Express endpoints, 16 Mongoose schemas, 5 RBAC roles, 493 backend tests with 68% statement coverage.

Technical-functional lead on ArtCertify + Blockchain Data Products

2025 – Jun 2026

Bando Ecomic Lotto 3 (MiC PNRR / Activa Digital) · Technical Lead

Technical-functional lead on ArtCertify and on the 4 blockchain Data Products (Metadata Catalog, Auto-linking, Blockchain+IPFS Certification, Linked Data) of the Ecomic Lotto 3 'Advanced Fruition' tender (MiC Digital Library / Invitalia, PNRR funding, Dialogo Competitivo D.Lgs. 36/2023).

Founding Engineer / Senior Product Owner

09/2023 – 12/2025

Factor.fi · Full Time

Founding engineer at Factor: backend, jobs, signing-service and UI for the DeFi strategy marketplace and automated vaults.

Blockchain Product Owner

08/2023 – Present

Gruppo Activa · Full Time

Blockchain Product Owner focused on digitalization, problem solving and smart-contract development.

Blockchain & Web3 Consultant

01/2020 – Present

Andrea Ritondale · Freelance

Technical and managerial consulting for Blockchain, Web3, DeFi and NFT companies across development, architecture and go-to-market.

SELECTED PROJECTS

Haelias

2022 – present

/haelias · B2B SaaS · Pharma Procurement · Solo CTO / Principal Engineer (with contributor support on UI)

End-to-end production stack across 5 independent git repos (core / ui / sync-worker / landingpage / haelias_docs): an Express + TypeScript backend exposing 143 endpoints mounted from a single `main.ts`, a React 19 + Tailwind 3 + MUI 7 SPA with 136 components organised in Atomic Design and 5 React Contexts (no Redux), a Vite landing page, and a Rust + Tokio sync worker that ingests Farmadati's SOAP catalog into the shared Managed MongoDB.

5.5M+
LIVE MONGODB DOCUMENTS

~14k
IN-STOCK CROSS-SUPPLIER PRODUCTS

143
EXPRESS ENDPOINTS (SINGLE `MAIN.TS`)

Mandate.Finance

2026 – present

/mandate · DeFi + AI agent layer · Founding Product Engineer & Technical Co-founder

Multi-repo platform across 11 workspaces — 6 runtime services on GCP Cloud Run (`backend`, `agent-executor`, `signing-service`, `mcp-gateway`, `jobs`, `stats-api`), a Foundry smart-contract suite (ERC-7821 `KairosBatchExecutor` + UUPS `KairosBillingTreasury` deployed at the same address on Base, Arbitrum and Ethereum mainnet via CREATE2), a private Postgres 16 with 59 versioned SQL migrations, two Next.js 15 frontends (`ui` and `landing`), an SSE-based agent test harness, and a public docs site.

11
COMPONENTS PRODUCTION-DEPLOYED

5
WEEKS TO SHIP

1,300+
TOTAL COMMITS

Bando Ecomic Lotto 3 — MiC PNRR (DPaaS / DPass)

2025 – Jun 2026

/dpass · Italian public sector · Cultural heritage · Blockchain data products · Technical-functional lead on ArtCertify + blockchain Data Products (RTI Activa Digital + Civita Mostre)

Three logical layers (per ALLEGATO 1.1 Parte II + Relazione Unica).

4
BLOCKCHAIN DATA PRODUCTS DESIGNED

6
CONSUMING PILOT USE CASES

3
RTI APPLICATION PLATFORMS

Factor

2023 – 2025

/factor · DeFi · Vault infrastructure · AI-native layer · Founding Engineer · Top contributor on Discover · 100% sole author on VaaS / Agent

Factor.fi is a DeFi vault infrastructure on Arbitrum, Base and Ethereum: ERC-4626 Studio Pro vaults, a manager-adapter pattern integrating Aave, Compound, Morpho, Silo, Uniswap V3, OpenOcean and Pendle, plus a typed SDK (`@factordao/sdk`, `@factordao/sdk-studio`).

2023 – 2025
ACTIVE PERIOD

~140k LOC
OWNED CODEBASES

468 + 253
COMMITS ON DISCOVER · STUDIO