

Ahmad Heidari

Principal Blockchain Engineer

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Open to: Web3 CTO · Head of Engineering · Principal / Staff Blockchain Engineer · Solana / DeFi Tech Lead

Professional Summary

Principal blockchain engineer and hands-on Web3 CTO with 12+ years in software delivery. At Cherry AI, owns Solana trading, DeFi infrastructure, token-launch systems, and Telegram products serving 700K+ active users. Reduced median copy-trade submission from 225 ms to 6 ms; built Rust ingestion across 19 Solana DEX protocols. Stack: Rust, Solana/Anchor, TypeScript/Node.js, Go, Redis, ClickHouse, PostgreSQL, Docker, Linux. Also ships production Web2 systems when required. Keywords: Solana, DeFi, DEX, copy trading, MEV, Jito, Yellowstone gRPC, EVM, Solidity, Web3, low-latency systems, principal engineer, CTO.

Core Skills

Blockchain & Web3: Solana, Anchor, SPL Token/Token-2022, Carbon, Yellowstone gRPC, Jito MEV Bundles, Address Lookup Tables, EVM, Solidity, Web3.js, Ethers.js, Viem, Turnkey MPC/HD wallets, DEX integrations, cross-chain bridges, copy trading, DeFi, token launch, smart contracts. **Backend:** Rust, TypeScript, Node.js, Go, Python, Redis, PostgreSQL, ClickHouse, TimescaleDB, MongoDB, microservices, WebSockets, gRPC. **Clients:** React, Flutter, Telegram bots/mini apps. **Ops:** AWS, Docker, Linux, systemd, PM2, Nginx. **Leadership:** technical strategy, architecture, mentoring, delivery, incident response.

Professional Experience

2022—Present

Dubai, UAE

Cherry AI

CTO / Principal Blockchain Engineer

Lead engineering strategy and hands-on development for Solana trading, analytics, token-launch, and Telegram products serving 700K+ active users.

- Architected a production Rust platform that ingests and decodes activity across 19 Solana DEX protocols using Carbon and Yellowstone gRPC, then distributes real-time data through Redis Streams, ClickHouse, HTTP APIs, and WebSockets.
- Reduced the median direct copy-trade submission path from 225 ms to 6 ms through hot-path redesign, direct DEX transaction builders, durable-nonce optimization, and parallel submission through Jito, Helius, Astralane, Oslot, Temporal, and TPU providers.
- Designed independently deployable services for live monitoring, API delivery, copy execution, take-profit/stop-loss automation, KOL reporting, narrative tracking, and alerting, enabling isolated scaling and safer production releases.
- Built KOL intelligence and copy-trading capabilities including convergence signals, wallet analytics, rule-based strategies, custodial key encryption, PnL simulation, trailing stops, and automated buy/sell execution.
- Built Cherry Sniper's Telegram-native Solana trading experience across token discovery, buy/sell execution, positions, limit and DCA orders, copy trading, referrals, withdrawals, and reward-driven engagement.
- Delivered a Telegram analytics bot used by 700K+ users and a tap-to-earn mini-game that reached 10M+ registered players.
- Built PumpAI Launchpad with bonding-curve token launches and an IDO platform that raised \$300K within 48 hours.
- Operate the production stack across Linux, Docker, systemd, Nginx, Redis, ClickHouse, PostgreSQL, MongoDB, and TimescaleDB.

Selected technologies: Rust, Solana, Anchor, TypeScript, Node.js, React, Redis, ClickHouse, PostgreSQL, TimescaleDB, MongoDB, Docker, Linux

Feb—Apr 2026

Approximately six weeks

Token Launcher & Autonomous Trading Infrastructure

Lead Web3 Engineer

Architected and built a high-performance multi-chain token-launch and autonomous trading platform across backend services, a React/Vite web client, and Flutter applications with full feature parity on iOS and Android.

- Delivered six PM2-clustered microservices and a Go RPC balance listener streaming through Redis Pub/Sub at sub-second latency.
- Implemented 50 ms auto-sell polling with Redis distributed locking and single-executor guarantees, plus snipe-on-create buys within 30 ms of minting.
- Used Address Lookup Tables to execute atomic swaps for up to 16 wallets on PumpFun and 12 wallets on LetsBonk/Bags, with Jito MEV Bundles and Astra same-block atomic submission.
- Integrated Turnkey server-side signing, MPC/HD wallets, sub-organizations, email OTP, and Google OAuth with a PostgreSQL/Prisma model for users, wallets, referrals, and cross-chain swaps.
- Added Base and BSC execution for Clanker v4 and ERC-20 assets through Ethers.js/Viem, plus SideShift cross-chain swaps and SplitNow routing across 40+ exchanges.
- Built AI-driven Twitter feed analysis and trade triggers with Grok/xAI, MiniMax, and StepFun, supported by Redis leader election and deduplication.

Selected technologies: TypeScript, Node.js/Express, Go, Redis, PostgreSQL/Prisma, Solana Web3.js, Anchor, SPL Token/Token-2022, Jito, Astra, Turnkey MPC/HD wallets, Ethers.js, Viem, React 18, Vite 7, Flutter/Dart, Riverpod, go_router, PM2

Aug 2023—Dec 2024

Remote

Degenz

CTO / Core Engineer

- Led product architecture and core development of an EVM new-pair intelligence platform focused on identifying safer early-stage tokens.
- Designed analysis pipelines for holder patterns, liquidity, volume, and token-risk signals, translating on-chain data into actionable screening workflows.
- Managed the engineering team and delivery roadmap while remaining hands-on across backend services, data processing, and the React application.

Selected technologies: Node.js, EVM, Web3, MongoDB, Redis, React

Oct 2023—Feb 2024

Remote

Sect Group

Team Lead / Senior DevOps Engineer

- Led delivery and production operations for blockchain revenue-sharing systems serving multi-user environments.
- Optimized database queries and caching paths, reducing query time by 40%.
- Improved deployment reliability and service performance across Python, Node.js, MySQL, Redis, and Linux infrastructure.

2022—Sep 2023
Dubai, UAE

Planet Memes
CTO

- Directed development of a blockchain gaming platform integrating Ethereum, BNB Smart Chain, meme-token mechanics, and NFTs.
 - Led the design and deployment of secure smart contracts and scaled the application for high-traffic user interactions.
- Selected technologies: Solidity, EVM, JavaScript, Web3, HTML, CSS

2021—2022
Istanbul, Türkiye

ArabNetwork
CTO

- Promoted from smart-contract auditor to CTO and took ownership of technical strategy, architecture, and engineering delivery.
 - Built a non-custodial wallet, token-presale dApp, and private blockchain solutions focused on user control, security, and transaction performance.
- Selected technologies: Solidity, JavaScript, EVM, private blockchain

Selected Technical Portfolio

02 BonkKOLS trader intelligence	– Built a wallet-connected Solana product for tracking elite traders on Bonk, following live KOL activity, and reviewing real-time trades through a focused desktop interface.
03 Real-time Solana monitoring & execution	– Built and evolved a production Solana platform with 300+ Rust source files, 19 DEX integrations, pre-confirmation shred ingestion, real-time analytics, and multi-provider transaction submission. – Created a low-latency Solana shred tracer that decodes 12 major DEX families with no database or disk I/O in the hot path; benchmarked at approximately 388 decoded instructions per second. – Developed an atomic Solana arbitrage system with Anchor on-chain routing, off-chain opportunity search, profitability guards, and execution controls.
04 Multi-chain & Telegram products	– Built a TypeScript Telegram voting platform with REST and WebSocket APIs, Redis-backed sessions, PostgreSQL persistence, JWT authentication, and payment support for Solana and EVM networks. – Engineered an eight-service Telegram-native attention platform using Python, FastAPI, Redis, PostgreSQL, TimescaleDB, pgvector, background scoring, campaign workflows, and real-time APIs.
05 Additional production systems (Web2)	– SnapSugar: Go, PostgreSQL/TimescaleDB, and Redis diabetes-management ecosystem—glucose tracking, medication adherence, food intelligence, lab analysis, and multi-channel delivery (mobile, Telegram, WhatsApp). – Independent API, worker, personalization, Telegram, and WhatsApp services with health checks, queues, webhook security, rate limiting, and graceful degradation—secondary proof of production multi-service delivery outside crypto.

Earlier Engineering Experience

2020—2022 · Tehran Arash Frontend Developer Delivered 5+ responsive web projects and improved client satisfaction by 30% through reliable delivery and user-focused implementation.	2021 · Remote Talan Full-Stack Team Lead Led delivery of a full-stack product using Node.js, React, and SQL; coordinated UI/UX integration and completed the project ahead of schedule.	2019—2020 · Tehran Tarnama Gostar Frontend Team Lead Advanced from junior developer to team lead, mentored 4+ developers, and reduced development cycles by 25% through improved workflows.	Jan 2014—Aug 2019 · Tehran / Remote Independent Software Developer Delivered 20+ custom web applications for clients across frontend, backend, database, and deployment responsibilities.
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Languages Farsi · English · Arabic