

Hamza Ibrahim

AI Operating Infrastructure, CEO and Operator

hibrahimrn@gmail.com | ceo@ariaventuresllc.com | portfolio.ariasos.com

PROFESSIONAL SUMMARY

Founder and CEO with 15 years operating companies, now building AI-native operating infrastructure end to end. I direct large language models to reason, plan, research, and generate code, and I build the deterministic systems that turn that reasoning into verifiable state change. My work pairs an LLM reasoning layer with enforcement gates, signed execution passports, provenance receipts, and explicit evidence tiers, so that every serious claim is backed by a receipt rather than a vibe. Targeting VP or Head of AI, Founding AI Engineer or CTO, and Chief AI Officer roles where production-grade agentic systems, AI governance, and operator judgment intersect.

CORE COMPETENCIES

AI operating infrastructure, agentic systems architecture, LLM orchestration and tool use, deterministic execution and governance, AI evaluation and verification, evidence and claim discipline, cross-CLI agent harnesses, retrieval and research substrates, real-time voice agents, prompt and context engineering, distributed systems, cloud and edge deployment, product and P and L ownership.

Technical: TypeScript, Node.js, Python, Rust, React, PostgreSQL, Qdrant, Redis, Kubernetes, Cloudflare Workers and Pages, Docker, REST and streaming APIs, Anthropic Claude, OpenAI, and xAI model APIs.

SELECTED SYSTEMS (ARCHITECTED AND DIRECTED)

Aria Connector: *cross-CLI agent governance harness*

- Published as the npm package @aria_asi/cli; wires Claude Code, Codex, and OpenCode into one harness with a local runtime, deterministic Coach gates, action ledgers, and doctrine-triggered repair.
- High-risk actions are blocked at the gate; a single low-risk cognition miss is repaired once and then hard-stopped, turning agent quality into an enforced property rather than a hope.

Atlas and Sentinel: *real-estate market intelligence and acquisition origination*

- Maps public sources into deterministic lanes and locks pricing, outreach, title, and buyer claims until evidence clears; surfaces debt stress, vacancy drift, and lien stacking before a deal prints.
- Live operator cockpit on a Rust API with readiness-gated underwriting and predictor-ranked opportunities.

WholesaleDispo CRM: *action-bounded command center*

- A chat-and-voice command surface where the model surfaces one decision at a time, prepares and records bounded operator actions, and refuses unsupported rankings.
- Real-time voice spine mints ephemeral session tokens server-side, so the provider key never reaches the browser; smoke runs confirm zero provider calls leak client-side.

Research Substrate: *deterministic source and retrieval work*

- In-house retrieval and crawl substrate built to replace third-party crawl and answer services; a file-backed queue with a stable job hash makes the same manifest replay deterministically.
- Every job writes content, markdown, DOM, and body-text hashes as a provenance receipt; disallowed hosts and unsafe fetches are hard-blocked, not silently skipped.

CEO Decision Book and Funder Compass: *operating and capital intelligence*

- Converts operating counts into proof-gated CEO decisions, each with the proof required, the risk if delayed, locked actions, and a prediction ledger closed by an after-action review.
- Grades 3,290 capital records by evidence: prior capital committed is fact, a stated mandate is inference, and list membership alone is hypothesis; no list-tier record promotes to fact without a primary receipt.

ENGINEERING AND GOVERNANCE PRINCIPLES

- Reasoning is advisory; execution is enforced. Models propose, deterministic gates dispose, and authority is granted per capability rather than assumed.
- Receipt before claim. Five evidence tiers (Live, Active-Local, Verified QA, Repository, Proposed) are labelled and never allowed to borrow each other's credibility.
- The codebase maps itself: a doctrine-bound provenance graph of 74,663 nodes and 303,789 cited edges across 9 substrates records why each unit exists.

LEADERSHIP EXPERIENCE

Founder and Chief Executive Officer: *Aria Ventures LLC, REI Holdings Trust, WholesaleDispo*

- 15 years owning operations, P and L, and product across real-estate acquisition, disposition, capital, and decisioning.
- Built and directed the AI-native operating stack above, taking systems from architecture to live production and deploying them to ariasos.com on Cloudflare.
- Set the evidence and governance doctrine the systems enforce, and translated 15 years of operator judgment into infrastructure that keeps the boundary between what is claimed and what is proven explicit.

LINKS

Portfolio and live proof room: portfolio.ariasos.com | Email: ceo@ariaventuresllc.com