

RAMON RIOS JR.

Principal AI Systems Architect & Logic Orchestrator

Denver, CO (Open to Relocate / Remote) | +1 385-630-3100 | info@ramonrios.net | Portfolio: <https://ramonrios.net/resume/1> | GitHub: <https://github.com/RamonRiosJr>

PROFESSIONAL SUMMARY

Lean Six Sigma Black Belt and Principal AI Systems Architect & Logic Orchestrator with **22+ years** of hands-on experience designing, securing, and scaling mission-critical IT infrastructure, enterprise ERP ecosystems, and autonomous AI workflows.

I specialize in walking into complex, high-compliance environments (healthcare, toxicology, financial services, and industrial manufacturing), mapping the systemic bottlenecks, and orchestrating multi-agent AI swarms, visual automation pipelines (n8n, MCP), and cloud infrastructure (AWS, Azure, Proxmox VE, Odoo 20) to deliver measurable ROI—including **98% marketing/ops cost reduction**, **85% manual data-entry elimination**, and **100% zero-downtime enterprise cutovers**.

CORE TECHNICAL COMPETENCIES

- **Multi-Agent AI Swarm Orchestration & Guardrail Engineering**
- **Visual Workflow Automation & API Orchestration** (n8n / MCP / Webhooks)
- **Deterministic Prompt Architecture & Hallucination Prevention**
- **Zero-Knowledge Cryptography** (AES-256-GCM) & **Edge Vault Design**
- **Healthcare & Regulatory Compliance Architecture** (HIPAA / FDA SaMD / FMCSA DOT)
- **Enterprise Systems Auditing & Threat Modeling** (Zero-Trust / IAM)
- **Hybrid Cloud & Infrastructure** (AWS Fargate, Terraform IaC, Microsoft Azure)
- **High-Availability Virtualization** (Proxmox VE, Hyper-V, VMware, Docker)
- **Enterprise Networking & BCDR** (UniFi, Cisco, BGP/OSPF/VPN, Datto, Kaseya 365)
- **Windows Server** (up to 2025), **Active Directory**, **Entra ID & M365/AVD Migrations**
- **Enterprise ERP/CRM Architecture** (Odoo 20, PostgreSQL, MS SQL Server, XML-RPC)
- **MarTech & Autonomous Revenue/SEO Operations** (n8n + Gemini Pipelines)
- **OS Internals & IPC Architecture** (Windows C#.NET CF_HTML, Win32 Clipboard)
- **Lean Six Sigma Black Belt Process Optimization & Executive Roadmapping**

PROFESSIONAL EXPERIENCE

Principal Systems Architect — **Colorado's Drug Testing Agency (Project CDTA)** (Denver, CO)

Jul 2026 – Present | **Impact:** 85% Manual Entry Reduction • Real-Time B2B Net-30 Billing • AWS + Terraform + Odoo 20

- **Result & ROI:** Replaced a fractured legacy stack (Wix, QuickBooks, Google Sheets, and paper faxes) with a unified ERP/CRM Toxicology Operations platform, reducing manual data-entry overhead by **85%**, cutting audit preparation from days to seconds, and accelerating B2B Net-30 billing reconciliation from 3 days to real-time.
- **Process Automation & Chain of Custody:** Architected end-to-end digital workflows governing DOT consortium enrollment (/consortium), self-service walk-in kiosks (/kiosk), employee Fast-Pass tokens, cryptographic Chain of Custody (CCF), automated random pools, and bank-grade secure PDF delivery to Probation Officers.
- **Zero-Trust Cloud Infrastructure:** Orchestrated agency-wide deployment on AWS using Terraform IaC, high-availability PostgreSQL, and containerized Odoo services compliant with FMCSA/DOT and clinical toxicology standards.

Founding Builder & Lead Systems Architect — **HumanOS Foundation (Aura hOS™)** (Remote)

Nov 2025 – Present | **Impact:** Eradicated the "15–20 Page Clipboard Penalty" (Proven Across 6 Clinics & 2 Hospitals)

- **Clinical & Regulatory ROI:** Achieved structural immunity to centralized cloud breaches for health-tech deployments—bypassing FDA SaMD Class II and FTC HBNR BAA liabilities while eliminating the visceral **"15–20 page waiting-room clipboard penalty"** validated across a 1-year field study in 6 clinics and 2 hospitals.
- **Zero-Knowledge Cognitive Exoskeleton:** Guided the end-to-end architecture of **Aura hOS™**, routing patient and neurodivergent executive-function telemetry from React/TypeScript frontends to local SQLite edge vaults and PostgreSQL nodes via **AES-256-GCM encrypted QR handshakes**.
- **Deterministic AI Audit Pipelines:** Engineered multi-agent validation guardrails (*Inquisitor & Paradox Hunter* nodes) and a Stealth ICD-10 clinical taxonomy engine to prevent LLM hallucinations during regulatory compliance sweeps.

Principal Solutions Architect & Systems Integrator — **Coqui Cloud (B2B Enterprise Contracting)** (Denver, CO / Remote)

Jan 2020 – Present | **Impact:** Slashed Client Marketing/Ops Spend from \$1,200/mo to <\$20/mo (98% Cost Reduction)

- **Autonomous AI & MarTech ROI:** Architected visual n8n and multi-agent Gemini orchestration pipelines that scaled client SEO content output from 6 posts/month to 365-day continuous coverage while slashing operational spend from **\$1,200/month to under \$20/month (98% reduction)**.
- **Enterprise Infrastructure Modernization:** Spearheaded zero-to-one infrastructure overhauls for industrial and B2B clients (including Rocky Mountain Steel Inc.), migrating legacy workloads to high-availability **Proxmox VE clusters** hosting Windows Server 2025, Dockerized Firezone VPNs, and hardened Samba bridges for legacy industrial machinery.
- **Commercial Odoo Ecosystem:** Designed, published, and maintained production enterprise modules on the Odoo App Store (*CoquiCal Native Scheduler, NFC/QR Digital Business Card vCard, and AI Blog Engine*) backed by PostgreSQL, Caddy/Nginx reverse proxies, and Kaseya 365 / Datto BCDR stacks.

Senior Onsite IT Systems Engineer & Consultant — **Networks Unlimited (MSP)** (Montrose, CO)

Aug 2023 – Aug 2024 | **Impact:** 100% Zero-Downtime Clinical Operations • 50+ Hr Parallel SharePoint & Azure AVD Cutover

- **Zero-Downtime Healthcare Uptime:** Served as the primary onsite technical escalation advisor for hospital executives and regional medical centers, guaranteeing **100% zero-downtime operations** across hybrid cloud, Windows Server, virtualization, and MS SQL Server environments.
- **High-Stakes Cloud Cutover:** Engineered and executed a complex **50+ hour parallel migration** of enterprise SharePoint and Azure Virtual Desktop (AVD) infrastructure protected by Acronis BCDR, completing the cutover with zero operational interruption.

Technical Operations Specialist — **Goldman Sachs** (Salt Lake City, UT)

Apr 2022 – Jul 2023 | **Impact:** Supported 5,000+ Enterprise Financial Users • Lean Six Sigma Infrastructure Workflows

- **Enterprise Financial Infrastructure:** Operated onsite across the Salt Lake City and South Jordan campuses within a strict, zero-tolerance financial engineering environment supporting **5,000+ enterprise users**.
- **Deterministic Operations:** Resolved complex network trace anomalies, managed mission-critical hardware lifecycle via Lean Six Sigma workflows, and maintained HP Server Racks, Cisco Switches, Cisco VoIP, and enterprise endpoints.

Systems Engineer Tier II (Project Engagements) — **i.t.NOW (MSP)** (Pleasant Grove, UT)

Jan 2017 – Sep 2017 | **Impact:** 9-Month Enterprise MSP Project Engagement • Zero Data Loss Datto BCDR & O365 Rollouts

- **Multi-Project Enterprise Rollouts (9 Months):** Executed a dedicated 9-month series of commercial infrastructure projects, VMware/Active Directory migrations, and Microsoft O365 security deployments for healthcare, education, and municipal clients.
- **Site Reliability & Disaster Recovery:** Governed multi-site backup and disaster recovery matrices utilizing Datto BCDR appliances and hardened Barracuda email security gateways, achieving **100% zero data loss** across all managed client cutovers.

Founder, Owner & Principal IT Consultant — Rios Computer Designs (Juana Díaz, PR & Salt Lake City, UT)

May 2004 – Dec 2020 | **Impact:** 16-Year Retail Store & B2B IT Consultancy • 3 Physical Locations • 7,000+ SKU Inventory

- **16-Year Retail Store & B2B Operations:** Founded, scaled, and operated a retail computer design store, hardware diagnostics center, and B2B IT consultancy for 16 years across **3 brick-and-mortar retail locations and technical labs.**
- **Automated Inventory & Ticketing Scale:** Engineered custom inventory and service-ticketing workflows governing an active catalog of **7,000+ unique hardware SKUs**, custom workstations, and commercial repair queues.
- **End-to-End SMB Infrastructure:** Designed and deployed commercial LAN/WAN networks, firewalls, virtualization hosts, and Windows Server environments for regional business clients.

KEY ARCHITECTURAL DEPLOYMENTS & ROI

CDTA Unified Toxicology Operations & DOT Compliance Suite — 85% Manual Entry Reduction • Real-Time Net-30 Billing • Audit Prep Cut from Days to Seconds

Consolidated a fragmented multi-vendor clinical operation (Wix, QuickBooks, spreadsheets, paper faxes) into a single high-concurrency Odoo 20 & AWS platform. Engineered public donor booking (/book), walk-in self-service kiosks (/kiosk), employer DOT random pool automation (/consortium), electronic Chain of Custody, and bank-grade encrypted PDF delivery for Probation Officers.

Aura hOS™ — Zero-Knowledge Cognitive Exoskeleton & Clinical Intake Engine — Eradicated the 15–20 Page Clipboard Penalty • Bypassed FDA SaMD Class II & FTC HBNR BAA Liabilities

Designed and deployed a local-first cognitive prosthetic and clinical intake architecture proven across 1 year in 6 clinics and 2 hospitals. Patients and neurodivergent users retain cryptographic custody of their telemetry on-device and transmit structured intake payloads via ephemeral AES-256-GCM QR handshakes—so no patient ever walks into an exam room still holding a 20-page clipboard.

CoquiAudit, CoquiProposals & CoquiPulse — Sovereign Odoo 20 FinOps, SOW & SLA Suite — 100% SaaS Tax Elimination (Calendly, PandaDoc, BetterStack) • SHA-256 E-Sign & Live SLA Telemetry

Engineered a commercial suite of native Odoo 20 Community modules replacing fragmented B2B SaaS subscriptions: **CoquiAudit** (interactive FinOps & SaaS sprawl TCO calculator at /audit-calculator), **CoquiProposals** (interactive milestone Statement of Work studio with HTML5 Canvas e-signatures and SHA-256 audit hashes at /proposals), and **CoquiPulse** (live HTTP/TLS infrastructure SLA portal at /status).

Autonomous Multi-Agent Content & SEO Orchestration Engine — Slashed Monthly Marketing Spend from \$1,200/mo to <\$20/mo (98% Cost Reduction) • 365-Day Output

Engineered an autonomous multi-agent publishing pipeline that researches technical architecture topics, enforces brutalist editorial guardrails, generates dark-mode visual assets, and publishes SEO-interlinked articles directly into Odoo via XML-RPC.

PasteRich™ Daemon & Coqui Cloud Odoo 20 Enterprise Addon Suite — Sub-10ms OS Clipboard Transformation • Commercial Self-Hosted Cal.com & vCard Replacements

Built and shipped commercial-grade open-source and Odoo 20 applications—including **PasteRich™** (global hotkey Markdown-to-Rich-Text daemon), **CoquiCal** (native Cal.com scheduling engine), and the **Enterprise Digital Business Card vCard** app published on the Odoo App Store.

Industrial & Medical Hybrid-Cloud Modernization (Proxmox VE & Azure AVD) — 100% Zero-Downtime Cutovers Across Medical Centers & 30-Year Legacy Manufacturing Plants

Architected high-availability Proxmox VE clusters, parallel 50+ hour Azure Virtual Desktop & SharePoint migrations, and isolated SMBv1 Samba bridge appliances that safely connected 30-year-old industrial steel-mill machinery to modern zero-trust networks.

EDUCATION & CERTIFICATIONS

- **Lean Six Sigma in IT (Black Belt)** — Management Strategy Institute (Systemic Efficiency, Deterministic Workflow Modeling & Waste Reduction)
- **Microsoft Certified: Windows Server Administration Fundamentals (MTA)**
- **B.S. in Computer Science Coursework (90% Completed)** — Universidad Interamericana de Puerto Rico
- **High School Diploma** — Graduated May 2002 (Age 16, Accelerated Academic Track)

VERIFIED ASSETS & PROOF OF WORK

- **Interactive Executive Resume & ATS API:** <https://ramonrios.net/resume/1>
- **Sovereign Medical Engine (Aura hOS™):** <https://aurahos.io> | <https://ramonrios.net/AuraHOS>
- **Toxicology & DOT C/TPA Operations Suite:** <https://ramonrios.net/toxicology>
- **CoquiCal, FinOps Audit & SOW Sign Studio:** <https://ramonrios.net/book> | <https://ramonrios.net/audit-calculator> | <https://ramonrios.net/proposals>
- **Odoo Enterprise App Store (CoquiCards vCard):** https://apps.odoo.com/apps/modules/18.0/odoo_digital_business_card_coquicloud
- **GitHub & Technical Blueprints:** <https://github.com/RamonRiosJr> | <https://ramonrios.net/blog>