

RIZWAN DATOO

INTELLIGENT AUTONOMOUS SYSTEMS ARCHITECT | AI SYSTEMS ENGINEER PRODUCT & INNOVATION ARCHITECT

Portfolio: riz-ai.rz07860.chatgpt.site | GitHub: github.com/RizAISystems

Work Authorized: US · Canada · UK | No Sponsorship Required

ENGINEERING IDENTITY

Engineer by nature, systems architect by design. I originate technical concepts, define architectures and develop working systems from complex or undefined problems. I challenge designs, anticipate limitations and integrate AI, software, enterprise computing, physical systems and performance engineering. I direct specialized AI resources across research, development and validation while retaining end-to-end engineering responsibility.

CORE CAPABILITIES

Systems Architecture	Intelligent Autonomous Systems	Applied AI & Multi-Model Orchestration
End-to-End System Development	Rapid Domain Acquisition	Complex Problem Decomposition
Automation & Workflow Engineering	API / MCP Integration	Decision & Execution Systems
Validation & Test Architecture	Risk, Safety & Governance	Observability & Diagnostics
Python / FastAPI	TypeScript / Vite	Technical Leadership

SELECTED SYSTEMS ENGINEERING EVIDENCE

Private product identities withheld. Public engineering references include V.I.R.A.L. Motorsport and Bounded Agentic Execution Architecture.

➤ Intelligent Autonomous Systems Architect | AI Systems Engineer | 2022–Present Intelligent Autonomous Digital Operations Platform

- Architected an autonomous workflow that converts live external data into scored opportunities, generated actions, validation, approval and controlled execution.
- Designed explicit separation between read, review and mutation authority, with dry-run, approval and repair paths preserving operator control.
- Integrated multiple external platforms through MCP/API interfaces while making schema, connector and dependency failures observable, diagnosable and recoverable.
- Verified 38/38 focused offline checks; held publication because broader regression remained incomplete.

Real-Time Autonomous Decision, Validation & Execution Platform

- Architected the end-to-end path from live market state through signal generation, execution gates, broker order lifecycle, reconciliation, telemetry and replay.
- Engineered deterministic execution and risk controls around probabilistic decision logic, including exposure checks, order-state verification, reconciliation and evidence-based promotion.

- Built a validation architecture using chronological testing, friction and leakage analysis, benchmark comparison, regime checks and statistical controls.
- Rejected a promising but invalid retrospective result, froze the policy and built forward-only prospective validation; the observer control suite passed **14/14 tests** while remaining isolated from external execution.

➤ **Detailed Case Studies & Public Engineering Evidence:** [Portfolio](#) · [GitHub](#)

V.I.R.A.L. Motorsport & Performance Vehicle Engineering

Created V.I.R.A.L. Motorsport, a public synthetic vehicle-engineering demonstrator for early limitation detection, diagnosis, preservation, improvement and validation (18/18 synthetic tests). Separately engineered and validated performance vehicles, including the [VB500 SuperGT](#), across chassis, suspension, braking, power delivery and thermal behavior, informed by professional racing experience.

Physical Infrastructure & Production Systems

Designed and delivered integrated electrical, mechanical, security, environmental and production-support systems from ambiguous requirements through working installation and operational validation, including power, lighting, cooling-water distribution and OSHA-compliant production infrastructure.

TECHNICAL & CROSS-DOMAIN EXPERIENCE

- **Intelligent Autonomous Systems Architect** | AI Systems Engineer | California | 2022 - Present
Conceive and architect intelligent autonomous systems from undefined problems through software implementation, integration and validation. Direct specialized AI engineering resources while retaining responsibility for architecture, engineering decisions and controlled advancement.
- **Computer Engineer** | Enterprise Technology Support | London, UK | 1997 - 2002
Supported mission-critical technology for major global investment banks, including trading-floor and executive systems, resolving hardware, software, network and systems failures in high-availability environments.
- **Business & Fleet Maintenance Manager** | GTA Clunkers | Toronto, Canada | 2007 - 2015
Directed interconnected technical and commercial systems across vehicle recycling, repair, sales and fleet operations.
- **Founder** | Operations & Business Manager | Chiq Cliniq | Calgary, Canada | 2015 - 2019
Built a regulated medical clinic from concept to operation, integrating regulatory, facility, technology, staffing and commercial systems.
- **Facilities & Service Manager** | Wholesale Shutter Company | Beaumont, CA | 2019 - 2026
Designed and implemented solutions across electrical, mechanical, security and production environments where no predefined technical answer existed. Part-time. Hybrid.

EDUCATION

BSc (Honors) - Information Systems Design	Kingston University
Dip. Eng. - Electrical & Electronic Engineering	West London College
MBA (Cert.) - Marketing & Business	Imperial College London
Continuing Education, Applied AI & Automation	Self-directed - OpenAI technologies