LORENZ TAZAN

Systems Engineer | Infrastructure Automation Specialist

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U.S. Permanent Resident | Authorized to work for any employer without sponsorship

PROFESSIONAL SUMMARY

Systems Engineer with **7 years of hands-on IT experience** specializing in **infrastructure automation and AI-enhanced DevOps workflows**. Expert in managing enterprise distributed systemswith **99.9% uptime** while implementing **multi-LLM orchestration** (Gemini, Claude, GPT-4) for intelligent automation. Proven track record: **96% database performance improvements**, **65% cost reduction** through infrastructure optimization, and **93% deployment time reduction** via automated CI/CD pipelines. Expertise in **Docker**, **Kubernetes**, **Linux administration**, **network automation**, and **DevOps practices** with production-scale databases.

TECHNICAL SKILLS

Languages & Frameworks: Python, JavaScript/TypeScript, Node.js, Java, Bash, C/C++, PHP | Spring Framework, React, Express.js, Maven, FastAPI
Infrastructure & DevOps: Docker, Kubernetes, Linux (Debian/Ubuntu), nginx, Apache, CI/CD, Git, GitHub Actions, Terraform, Ansible, Nornir | MariaDB, MySQL, PostgreSQL, MongoDB, Redis
AI & Cloud: Multi-LLM Orchestration (Gemini, Claude, GPT-4), LangChain, RAG, ChromaDB, n8n, Agentic Systems | F5 BIG-IP, MikroTik, pfSense, Ubiquiti | Azure, AWS | Prometheus, Grafana, SRE

PROFESSIONAL EXPERIENCE

Systems Engineer

Land of Promise | Jan 2023 - Present | Remote

- Built and managed **24-server distributed ecosystem** serving **300+ concurrent users** with **99.9% uptime** through load balancing and automated failover protocols.
- Implemented **AI-enhanced infrastructure automation** for **Pterodactyl (containerized infrastructure management platform)** APIs, integrating multi-LLM systems (Gemini, Claude, GPT-4) for intelligent network configuration validation and reducing manual tasks **85%**.
- Optimized **JVM performance** and **MariaDB queries**, reducing application latency **56% (80ms → 35ms)** and database response times **96% (800ms → 35ms)** while handling **2M+ queries/day**.
- Led infrastructure migration to **Debian 12 bare-metal**, implementing **Docker containerization** and automated deployment pipelines, cutting operational costs **65%** and deployment time **93% (30min → <2min)**.
- Implemented **24/7 monitoring and alerting** with **Prometheus/Grafana**, reducing critical incident response time by **80%**.
- Developed **15+ custom Java modules** with **Spring Framework** integrated with MariaDB, MySQL, Redis, and MongoDB for distributed applications. Collaborated with **7-person technical team**.

Network Infrastructure Consultant

Proven Training Concepts (DoD Contractor) | Mar 2025 | Frederick, MD (On-site)

- Designed and documented **secure enterprise network architecture** using **Ubiquiti infrastructure** (UDM Pro, Switch Pro 24 PoE, Wi-Fi 6) for Department of Defense contractor facility.
- Produced comprehensive technical deliverables: BoM, CAT6 schematics, rack layouts, UPS redundancy plans, and disaster recovery documentation.
- Implemented **multi-layer security controls**: firewall rules, VLAN segmentation, and VPN controls aligned with **NIST 800-171** DoD cybersecurity standards.
- Achieved **0 audit findings** during government inspection for security compliance and project delivery.

Network Administrator / IT Specialist

Panay Telephone Corporation II | 2021 - 2022 | Philippines | Independent Contractor

- Deployed **ISP-grade routing infrastructure** using **MikroTik RouterOS** for enterprise telecommunications clients, managing **BGP routing**, **MPLS** configurations, and **700+ concurrent subscribers** with **99.8% network availability**.
- Implemented **pfSense firewall clusters** with advanced load-balancing algorithms, achieving average latency **<5ms to subscribers** and optimizing traffic across a **10Gbps fiber backbone**.
- Applied server security: ACLs, patch management, network segmentation. Provided **24/7 on-call support** for outages and optimization.

Team Lead - Customer Relationship Management

iQor | 2020 - 2021 | Philippines (On-site)

- Supervised support team of **12+ specialists**, conducted **Salesforce CRM** training on best practices and operational workflows.
- Analyzed customer data using **Excel** to improve service metrics, achieving **100% SLA compliance** during high-volume periods.
- Maintained Salesforce dashboards to streamline reporting and reduce handle time **15%**.

Owner / Technical Consultant

Teknomahika | 2015 - 2023 | Philippines

- Founded IT consulting business: hardware repair, performance optimization, custom infrastructure builds for SMB clients.
- Delivered **hardware/software troubleshooting** achieving **95%+ satisfaction** across **20+ project engagements** with **80%** repeat business rate.
- Managed end-to-end delivery: procurement, installation, testing for custom server/workstation builds.

KEY PROJECTS

AI-Powered Network Automation Framework | *Multi-LLM Orchestration System*
Architected **agentic AI system** orchestrating **3 specialized LLM agents** with **LangChain + ChromaDB RAG** to automate network infrastructure workflows, reducing configuration errors from **12% to <1%**.

NetOps Automation & Dual-AI Validation Platform | *Enterprise Network Automation*
Developed production-grade **network automation framework** managing **100+ devices** with **99.9% success rate** and **dual-AI validation**. Built **event-driven architecture** with **n8n workflow orchestration** for zero-touch compliance.

Global Traffic Manager with AI-Powered Monitoring | *Intelligent Load Balancing*
Engineered **advanced GSLB solution** using **F5 BIG-IP GTM** with custom **Lua iRules** for geographic traffic steering, reducing latency **40%** with **AI-powered health monitoring**.

EDUCATION

Bachelor of Science - Computer Engineering (Undergraduate Coursework)
Interface Computer College | 2017 - 2020
Completed 3 years of curriculum focused on Computer Systems Architecture, Data Structures & Algorithms, Network Engineering, and Database Management.

TECHNICAL LEADERSHIP & R&D

- **Current Research:** Engineering autonomous "Self-Healing" infrastructure models and multi-agent AI supervisors for zero-touch network operations.
- **Ecosystem Focus:** Deepening integration between Cloud-Native architectures (Kubernetes/AWS) and Agentic Workflow Orchestration (n8n/LangChain).
- **Open Source:** Active contributor to automation frameworks, focusing on LLM-driven configuration validation and security policy enforcement.

References available upon request