

PAUL D. ALLEN

AI Operations & Technical Operations Leader | Operational Intelligence | Incident Management | Governed AI Systems

Pomona, CA | 626.217.2327 | paul@pauldallen.systems | [linkedin.com/in/paul-d-allen](https://www.linkedin.com/in/paul-d-allen) | pauldallen.systems

PROFESSIONAL SUMMARY

AI operations and technical operations leader with 18+ years in high-availability network operations, incident management, real-time telemetry, service restoration, and executive communications. Applies frontline operational discipline to governed AI systems, with hands-on experience in retrieval-augmented generation (RAG), Model Context Protocol (MCP), LLM and retrieval evaluation, tool governance, observability, and bounded response design. Experienced translating complex technical signals into clear operational decisions, coordinating cross-functional response under pressure, and delivering repeatable technical programs and processes that improve reliability and decision quality.

CORE EXPERTISE

AI Operations & Governance	RAG; MCP; prompt/context design; LLM evaluation; retrieval evaluation; grounded generation; tool governance; fail-closed behavior; acceptance testing
Technical Stack & Observability	Python; Linux/WSL2; Docker; Qdrant; Ollama; Gemma; EmbeddingGemma; InfluxDB; Grafana
Integration & Operations	REST APIs; JSON; YAML; Git/GitHub; Asterisk/SIP/VoIP; incident management; RCA; telemetry; runbooks/SOPs; vendor & utility coordination

AI UPSKILLING & APPLIED LEARNING

Independent Study | Feb 2025 - Apr 2026

- Completed structured coursework, technical labs, and independent study in applied AI, machine learning, model evaluation, AI governance, and retrieval-augmented generation, including programs from Duke University, the University of Maryland, DeepLearning.AI, and Microsoft Azure AI-900 certification.
- Built a practical foundation in context-aware system design, retrieval evaluation, human factors, and governed AI patterns that later informed the architecture, testing, and operational boundaries of Zora.

SELECTED AI & OPERATIONAL SYSTEMS WORK

ZORA - Context-Aware Operational Intelligence System

Independent Technical Project | May 2026 - Present

- Designed and built a governed operational-intelligence system that assembles contextual evidence before producing bounded responses, applying incident-management principles to AI-assisted decision support.
- Built and validated a RAG pipeline using Qdrant, EmbeddingGemma, Gemma through Ollama, Python, Docker, and WSL2/Linux; achieved 98% Top-1 retrieval accuracy, 100% Hit@3, and 99% mean reciprocal rank on a known-answer evaluation set.
- Implemented MCP-governed tool interfaces with explicit capability boundaries and separated public/private paths; validated tool discovery, grounded retrieval, unknown-answer refusal, and bounded failure behavior.
- Closed final RAG acceptance at 16/16 checks passed, including deterministic ingestion, Qdrant persistence after restart, citation/source validation, and refusal behavior without fabricated sources.
- Integrated time-series context and observability with InfluxDB and Grafana and extended system access through REST and Asterisk/SIP/VoIP; maintained architecture, runbook, evaluation, recovery, and release evidence.

PROFESSIONAL EXPERIENCE

CHARTER COMMUNICATIONS - REGIONAL OPERATIONS CENTER

Regional Operations Center (ROC) Lead | Irwindale, CA | Sep 2016 - Dec 2024

- Directed real-time surveillance, incident response, and service restoration across Southern California, Arizona, and Hawaii in a 24/7 ROC, coordinating field teams, engineering, vendors, utilities, and senior leadership.
- Led wildfire and Public Safety Power Shutoff (PSPS) response as primary technical liaison with SCE, SDG&E, and local utilities; coordinated response and executive updates, helping maintain uninterrupted service during managed events and 100% required customer-notification compliance with no fines.
- Trained and mentored ROC staff, improving technical decision-making and reducing fiber-damage outage resolution from approximately 10 hours to less than 5 hours.
- Led root-cause analysis and corrective-action efforts for persistent network issues, contributing to a 10-15% year-over-year reduction in recurring incidents.
- Analyzed real-time network telemetry and service-delivery trends, contributing to a 21% reduction in outages through earlier identification and proactive impairment response.
- Produced executive outage bulletins, restoration timelines, and public-safety updates; contributed to annual ROC playbook and SOP reviews to improve workflow consistency and escalation readiness.

TIME WARNER CABLE

Network Operations Technician | Southern California | 2010 - 2016

- Monitored network conditions across Orange, Riverside, and San Bernardino Counties, preparing for high-impact events, weather conditions, planned maintenance, and construction activity.
- Correlated data across Unified, Remedy, Eventrak, CableEdge, and other network tools to assess outage scheduling, restoration time, customer impact, and escalation priority.
- Diagnosed DOCSIS and service impairments and provided advanced technical support, contributing to a 26% reduction in repeat technician trouble calls and reducing average on-site resolution time from 90 to 55 minutes.
- Collaborated with network operations and engineering teams on systemic service issues, SLA-impacting conditions, and network-wide reliability improvements.

Earlier Time Warner Cable roles: Tier III Support (2008-2010); Customer Care Mentor (2007-2008); Customer Care Professional (2006-2007).

SELECTED OPERATIONAL PROGRAMS

- CPUC Network Resilience - Supported system-wide battery-backup upgrades aligned with California 72-hour runtime requirements, strengthening service continuity during prolonged commercial-power outages.
- Public Wi-Fi Deployment - Assisted with provisioning and maintenance of Spectrum Mobile hotspot infrastructure, expanding public Wi-Fi access and supporting an additional customer revenue channel.
- Regional Voice & Troubleshooting Initiatives - Served as a call-center point of contact for an ACPvoice upgrade, supported region-wide implementation projects, and contributed to the OLA Troubleshooting Committee.

CERTIFICATIONS

Microsoft Certified: Azure AI Fundamentals (AI-900) - Sep 2025	Introduction to Model Context Protocol - Anthropic - Jul 2026
Managing Machine Learning Projects - Duke University - Feb 2026	Human Factors in AI - Duke University - Feb 2026
AI for Business Leaders - University of Maryland - Apr 2026	AI for Strategic Leadership - AI CERTs - Jun 2026
AI Python for Beginners - DeepLearning.AI - Jan 2026	

EDUCATION & PROFESSIONAL DEVELOPMENT

Allan Hancock - Graphic Design coursework, 2000-2004 (no degree)
NCTI - Regional Operations Center III, ROC II, ROC Fundamentals; Operations Center Technical Support 1 & 2; Return Path Operations
Additional AI training - AI for Everyone; Generative AI for Everyone; Machine Learning Foundations for Product Managers