

Paulina Stopa



UNIX ENGINEER · AI-DRIVEN INFRASTRUCTURE & SRE AUTOMATION

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01 — PROFESSIONAL SUMMARY

Unix Engineer with nine years running Sky's critical estate — production automation in Python, Bash and Ansible across ~10,000 hosts — now focused on AI-driven operations. By day I engineer reliability and reduce toil at enterprise scale; in my own time I have built and operate a complete autonomous-operations platform: 24/7 LLM agents executing scheduled operations behind human review gates, RAG-backed runbook automation, self-healing fleet automation with snapshot-and-restore, and Prometheus/Grafana observability on the AI platform with automated monitoring maintenance windows across the fleet. I designed and demoed an AIOps platform proposal for Sky's Unix team — LLM incident triage and root-cause analysis with gated Ansible remediation. I bring SRE discipline, working systems that prove the approach, and a track record of making AI adoption real inside Sky.

02 — CORE CAPABILITIES

SRE & Reliability: incident management, root cause analysis, SLIs/SLOs and error budgets, toil reduction, self-healing automation, change management, capacity planning, major incident coordination, operational standards

Automation, Cloud & Infrastructure as Code: Python, Bash, Ansible (AWX, Semaphore), Docker and Docker Compose, CI/CD (Gitea CI), GitOps workflows, Proxmox virtualisation, Linux/Unix at scale; multi-provider commercial cloud in production use — OVH, Hetzner and IONOS compute, Cloudflare WAF, DDoS protection and CDN, VMs, object storage; Kubernetes fundamentals (trained)

AI & LLM Operations: LLM integration (Claude, LiteLLM, Ollama), retrieval-augmented generation (Dify, Qdrant), autonomous agent operations, AIOps platform design, incident summarization, alert correlation and noise reduction, runbook automation, prompt engineering, human-in-the-loop governance

Observability & Telemetry: Prometheus, Grafana, metrics, logs and alerting, alert noise reduction through automated maintenance windows, dashboard design, telemetry-informed automation

Security & Governance: least-privilege design, secrets management (Ansible Vault), audit trails for AI output, GDPR-aware platform design, LDAP / identity and access management, Cyber Champions Black Badge (first at Sky)

03 — PROFESSIONAL EXPERIENCE

Unix Engineer — Sky UK Ltd

FEBRUARY 2017 – PRESENT

Leeds, United Kingdom · previously Shift Leader (2018–2019)

Engineer in Sky's largest Unix team, fulfilling senior-level responsibilities — reliability, automation and engineering standards across a ~10,000-host critical estate underpinning national-scale services.

- **Sky Unix AI Platform (AIOps proposal):** designed and demoed an end-to-end AIOps platform for the Unix estate — ServiceNow incident ingestion, LLM triage and root-cause analysis over a Dify RAG runbook knowledge base, and AWX/Ansible remediation behind human-in-the-loop approval gates — with anomaly detection, incident prediction and capacity forecasting scoped as platform capabilities. Delivered four interactive demo modules and a nine-section costed requirements report spanning PoC to enterprise rollout: 500 incidents/day, 5,000 hosts, 12+ integrations, HA topology, audit and GDPR controls.
- Develop and maintain production automation in Python, Bash and Ansible across the estate — eliminating repetitive toil, standardising change and reducing operational risk.
- Led the data conversion and migration of the central LDAP service authenticating and authorising tens of thousands of users across ~10,000 hosts — a critical availability dependency for the entire estate.
- Mentored engineers through migration of the Redirect platform: set configuration standards, reviewed changes and guided design decisions across hundreds of Sky domains, including sky.com, sky.ie and skysports.com.
- Own documentation and engineering standards for the wider team (Backline function); train and onboard new engineers to production standard.
- Former Shift Leader with Incident Coordinator training — hands-on incident management on a national-scale platform, from detection through resolution and review.
- Drive practical AI adoption across Sky's engineering community — regular contributor on GenAI, containerisation and security; work recognised by the Head of Enterprise Product Strategy (GenAI).

Independent AI Engineering — Autonomous Operations Platform

OCTOBER 2024 – PRESENT

Self-directed engineering programme

Designed, built and operate a production-grade autonomous-operations estate on my own infrastructure — the working counterpart to the platform proposed at Sky. Everything below runs today: versioned as code, monitored, and governed.

- **AI platform:** 63 Docker containers on a GPU-passthrough VM (2× NVIDIA P100) — LiteLLM model gateway, Ollama local inference, a self-hosted Dify RAG stack with Qdrant vector search, and speech (STT/TTS) services behind Traefik ingress; all defined as versioned Docker Compose infrastructure-as-code in self-hosted Gitea with CI.
- **AI hardware:** evaluated and self-hosted NVIDIA DGX Spark for local AI workloads (2026).
- **Autonomous agents:** two LLM agent harnesses running 24/7 on dedicated service accounts behind human review gates — executing scheduled operational tasks across 27 skill categories and authoring incident and postmortem reports published as internal sites.
- **ClawBoard (author; open source, MIT):** agent-operations dashboard providing real-time agent status over WebSocket, a full transcript audit trail, JWT authentication and a gated production/development deployment workflow — github.com/Wadera/clawboard.
- **Fleet automation:** 20 Ansible playbooks and 12 roles executed via self-hosted Semaphore across a two-node Proxmox HA cluster (~120 containers estate-wide) — snapshot-before-change with automated restore, per-host-class patching, automatic monitoring maintenance windows, Vault-encrypted secrets.
- **Observability:** Prometheus and Grafana on the AI platform, with automated monitoring maintenance windows across the fleet suppressing false alerts during change work to keep signal fidelity high.

Founder & Owner — SKYDAY

APRIL 2012 – FEBRUARY 2017

Chojnów, Poland

- Built one of Poland's largest voice-server platforms — 10,000+ concurrent users, 100,000+ registered accounts — including the custom CRM and billing system behind it.
- Operated dedicated-server infrastructure hosting hundreds of domains and services for clients including the Polish National Bank and Play (mobile operator).
- Led project teams end-to-end: scoping, build, operations and client relationships.

Co-founder — Digital Technologies S.C.

NOVEMBER 2014 – NOVEMBER 2016

Tychy / Kraków, Poland

Among the first certified commercial UAV operators in Poland (Civil Aviation Authority); delivered aerial photogrammetry and 3D measurement models for construction and solar-installation clients.

04 — RECOGNITION

- **Cyber Champions Black Badge** — first person at Sky to achieve the highest status in the security initiative
- **Sky Stars** — multiple nominations, including recognition from Nick Sarkissian, Head of Enterprise Product Strategy (GenAI)

05 — CERTIFICATIONS & TRAINING

- **Incident Coordinator** — Sky operational readiness training
- Ansible and Kubernetes training · OSINT certifications
- UAV Operator Certificate (25 kg class) — Civil Aviation Authority, 2014

06 — EDUCATION

BEng Computer Science: Systems and Networks

2010 – 2014

Witelon University of Applied Sciences in Legnica, Poland

Thesis: analysis and implementation of network monitoring tools (Nagios, Cacti, Zenoss) — an early observability specialism.

07 — LANGUAGES

Polish (native) · English (professional working proficiency; nine years working in the UK) · Italian (elementary)