Oleksii Khilkevych

Software Engineer | Platform Engineer | Site Reliability Engineer

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Looking for SRE/SWE/Lead/x-functional position in great team where initiative can make a real difference

Summary

Platform Engineer, SRE, DevSecOps with 9+ years designing and maintaining high-availability infrastructures with 99.9%+ uptime across cloud and on-premises environments and 20+ years of Dev experience, in contributor, manager and leadership roles. Specialized in Kubernetes, IaC automation, and observability. Proven track record managing 50+ production environments with focus on SLA/SLO compliance and incident response. Experienced in driving platform reliability initiatives, mentoring teams and leading automation efforts across hybrid cloud environments.

Programming Languages

Python · JavaScript · TypeScript · Java, Kotlin, Groovy · Rust · Go · bash

Experience

Platform Engineer (SysOps) DE-CIX, Frankfurt 09/2024 - Present

- rewrote account sync tool from Active Directory (AD) to OpenLDAP in modern Python
- developed DNS zone analysis tool for complicated BIND configs in Python
- implemented Terraform PoC as part of wider Proxmox PoC
- managed DNS, Azure, contributed to IaC, monitoring and automation
- incident response and troubleshooting of multi-site global Internet Exchange (IX) setup, 24x7 on-call rotation

Consultant & Founder Noroutine, Munich 09/2018 - Present

- implemented custom IdP (https://lane.id/) by OpenID Spec with some extra extensions, WebAuthN support and off-device login flow (TypeScript/Fastify)
- implemented cloud service interconnect (https://nail.lane.id/) with TCP-over-HTTP (custom WebSocket-like protocol, core idea is similar to frp reverse proxy but with a lot of extra sauce)
- implemented cloud MTA (https://shovel.mx/) for special mail processing and archiving
- implemented cross-platform service discovery mechanism for clients with limited DNS capabilities
- many interesting projects (LIR, anycast DNS, IoT, CDN, grey noise detection, eBPF, if to recall few spotlights)
- built complete infrastructure from 0 to 1 (baremetal servers with proxmox + vms and few k8s clusters on top), everything automated with stacks of multiple tools
- implemented GDPR compliance and processes
- upskilled three junior recruiters in GDPR and tech

Platform Engineer (Big Data) Allianz, Munich 10/2019 - 12/2023

- collaborated with several teams to migrate 50+ Big Data environments to Azure/AKS Cloud Infrastructure
- wrote NFS and LDAP metrics exporters in Go for Prometheus as per custom requirement
- maintained custom-branded BinderHub fork with internal extras and patches (Python)
- designed and implemented multi-tenant highly-available containerized monitoring solution for 50+ Allianz OE Big Data Analytics environments with alerting and long-term storage running on Nomad and later Azure
- was go-to person for several key areas, like ElasticSearch, JupyterHub, BinderHub, Development PoCs
- SLA/SLO management, incident response, troubleshooting and 24x7 on-call rotation
- proactively prepared the team for COVID lockdown

Principal DevOps Engineer ACI Worldwide / PAY.ON, Munich 09/2015 - 10/2019

- built and mentored DevOps team from 0 to 1, put all my heart into people, tooling and culture
- reduced release cycle, and increased releases frequency from per week to multiple times a day
- implemented DR tooling in Go for payment platform (with >300 tps) with automatic traffic failovers and DR exercises, saved $200k first week it was deployed, also wrote UltraDNS/Pingdom management CLI in Go
- modernized ancient tech stack to Git, Gradle, Jenkins
- was driving weekly code retreats and PoCs on k8s, containerization, virtualization, automation, hackathons, Git, Ansible, Docker Swarm, and more

Education

Igor Sikorsky Kyiv Polytechnic Institute Kyiv Ukraine

MS in Systems Analysis, Computer Science 2003 - 2009

Skills

- **Languages:** Rust, Go, Python, TypeScript, JavaScript, Java, Kotlin, Bash, SQL
- **Cloud & Platforms:** AWS, GCP, Azure, Kubernetes, Docker, Nomad, Helm, ArgoCD, Proxmox, VMware
- **Infrastructure as Code:** Terraform, Ansible, Packer, GitOps, pyinfra
- **Observability & Monitoring:** Prometheus, Grafana, ELK Stack, Jaeger, OpenTelemetry, InfluxDB
- **CI/CD & DevOps:** GitLab CI, GitHub Actions, Jenkins, ArgoCD, Harbor, Nexus, Artifactory
- **Databases & Storage:** PostgreSQL, Redis, MongoDB, ElasticSearch, ClickHouse, Ceph, MinIO, lmdb
- **Networking:** BGP, OSPF, VLAN, VxLAN, DNS (PowerDNS, BIND), TCP/IP, IPSec, Wireguard, SD-WAN
- **Security & Identity:** OAuth/OpenID, LDAP, mTLS, HashiCorp Vault, PKI/TLS, FreeIPA, Active Directory
- **Big Data & ML:** Spark, Airflow, Jupyter, vLLM, RAG, vector embeddings, CUDA
- **Message Queues:** Kafka, RabbitMQ, mosquitto, NATS
- **Programming**: TDD for cloud native and microservice architectures
- **Human Languages:** English (fluent), German (B2), Ukrainian (native)

Certifications & Training

- Kubernetes (self-certified via managing 5+ clusters the hard-way for a decade, exam-ready for CKA and CKAD)
- Infrastructure as Code (Terraform, Ansible, extensive production use)
- Site Reliability Engineering (Google SRE principles, production implementation)
- TOEFL (score 105)

Selected Projects

- **kekse** - specialized KV store for PASETO/Biscuit/JWT tokens, slowly going as a challenge to learn Rust
- **Richard** - my personal AI assistant that inflates my energy bill
- **Lane IdP** - IdP by spec with service discovery, WebAuthN, custom off-device auth flow support, https://lane.id/
- **Nail** - secure global service/app interconnect that uses Lane IdP, https://nail.lane.id/
- **Shovel MX** - Mail Transfer Agent (MTA) that delivers to Microsoft 365, Google Workspace and local archive, https://shovel.mx/
- **Scribe** - MJML template microservice
- **Disco** - cross-platform DNS-based service discovery for platforms where SRV records don't work, root is bringing you to random jam to keep the spirit, enjoy https://lane.to/
- **nrtn.me** - URL-shortener using Cloudflare Workers
- **tripwire** - port-scan/DDoS internet radar
- **dnsconfig** - custom dns server to use DNS as distributed KV store
- **rustlings-ua** - translation of Rustlings, https://github.com/noroutine/rustlings-ua
- **terraform-eui64** - EUI64 calculator as per RFC4291, https://github.com/noroutine/terraform-eui64
- **grit** - Grafana Dashboard Generator, https://pypi.org/project/noroutine-grit/

Professional Development & Lab Environment

- LIR Maintainer (de.noroutine)
- 18 supermicro servers, 2 JBODs, 1 GPU node for LLMs
- HV: VMWare VSAN, Proxmox with Ceph/NFS
- Containers: 5 vanilla k8s clusters with istio and some sporadic docker nodes
- Networking: 100/25/10Gbit of FortiGate, Arista, Mikrotik gear
- bird for BGP, wireguard/IPSec for VPNs
- PowerDNS, Postfix and Exchange for basics, OpenLDAP and Keycloak for accounts
- cert-manager and certbot for public certificates, maintain own multi-level internal CA
- Nexus OSS for repository and GitLab for Git and CI/CD/IaC
- Terraform, Ansible, pyinfra, ArgoCD for IaC
- all k8s clusters are peered with core routers via BGP
- most recently migrated everything to IPv4/IPv6 dualstack setup, including K8s too!

Most coding and CI/CD activity is in private GitLab, but I do sync some to GitHub

- **infra-setup** - how I build my infra, https://github.com/turbovillains/infra-setup

Prior Experience omitted: 13 years fullstack development (Java, web technologies) across various consulting engagements (2002-2015)

This resume was prepared with ohmycv.app