# Oleksii Khilkevych

# Software Engineer | Platform Engineer | Site Reliability Engineer

(+49) 163 166 96 87 | oleksiy@noroutine.me | github.com/noroutine | in/oleksiikhilkevych | Munich, DE 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

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 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

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

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**

#### **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, Imdb
- 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, 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)

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