

Krzysztof Nazarewski

KUBERNETES/CLOUD ENGINEER · DEVOPS/AUTOMATION/DEVEX ENGINEER · PYTHON/GO/IAC DEVELOPER

Warsaw, mazowieckie, Poland

📞 (+48) 530-019-621 | ✉️ cv@kdn.im | 🌐 nazarewk | 📱 nazarewk | 📄 nazarewk

Proficient with infrastructure & programming, passionate about automation & development experience.

Summary

I am striving to build highly automated, scalable and cloud-agnostic platform covering the whole software development lifecycle: starting with ergonomic local development through efficient test environments and CI/CD leading to secure, observable and highly available production.

I am focused on the Kubernetes, Infrastructure as a Code and Nix ecosystems to achieving above goals.

Skills

Programming	Primary: Python, Go, shell/bash, Nix; Basics: JavaScript, Lua, Java, CUE; Aspiring: Rust, Nickel
CI/CD	Argo CD/Workflows, Gitlab, CircleCI, Bitbucket, Luigi
Security	Vault, Netbird/Wireguard, authenticated/private infrastructure, unprivileged system services
IaC	Terraform (incl. writing providers), NixOS, GitOps
Containers	nix, docker, podman, buildkit, skopeo, buildah
Kubernetes	Talos, Rancher, k3s, EKS Helm, Kustomize, actively exploring config management improvements/alternatives
Observability	Elasticsearch/Opensearch, OpenTelemetry, Fluentd, Prometheus, Datadog
AWS	SDK (Python, Go), Route53, VPC, EC2, SSM, ASG, IAM, S3, Lambda, EKS and other EKS-assisting services
Backend	Python (Django REST Framework, asyncio/trio, Celery), PostgreSQL, Redis
Languages	Polish, English, basic mandarin

Education

Warsaw University of Technology

B.S. IN COMPUTER SCIENCE AND SOFTWARE ENGINEERING

Bachelor's Thesis - *Implementing Kubernetes cluster on diskless machines*

Warsaw, Poland

2011 - 2015, grad.2018

Experience

Signicat

CLOUD | DEVEX ENGINEER

Warsaw, Poland

Sep. 2023 - Dec. 2024

- Working in a small team of 5-8 professionals purpose-hired to assimilate infrastructure into company-wide platform after acquisition,
- Started with infrastructure best described as: too large for creators and (then) our new 4 person team, highly utilized, poorly automated, outdated, highly heterogeneous (k8s, mesos, cloud, on-prem),
- Were primarily concerned with keeping lights on while improving maintainability as much as feasible given the circumstances,
- Personally focused on automation of legacy systems and actively exploring & building understanding of company landscape to start integrating with shared platform,
- In a few months we have improved it enough to be actively maintainable by 2 people at a time, while the rest of the team worked towards the final goal,

Personal project

BUILDING UP HOMELAB

June 2024 - Aug. 2024

- Worked part-time during less active summer period to jumpstart a storage/backup cluster & self-assembled router,
- Made a first attempt with a set of Raspberry Pi 4s, but resource constraints made it impossible to run Ceph,
- Built 3 NAS machines then formed them into Talos cluster,
- Added simple secret management & made repository public: [nazarewk-iac/talos-configs](#),
- Implemented Nix-built workloads for immediate development feedback loop,
- Implemented ZFS-backed local storage with a mix of ZFS disk encryption/management scripts & OpenEBS,
- Implemented node-level Netbird VPN for remote access,
- Deployed proof of concept Ceph/Rook network storage cluster to figure out missing pieces,
- Started integrating Cilium for networking layer,
- Upgraded to IPv4+IPv6 ISP, purchased networking equipment and implemented a router on top of a NixOS module system, see [the code](#),

Incredevo

Warsaw, Poland

DEVOPS | CLOUD ENGINEER

Oct. 2022 - Aug. 2023

- Outsourced part-time (100h/mo) as the only cloud engineer in client's company. Was primarily responsible for implementation from scratch and upkeep of their EKS-based AWS infrastructure,
- Started by automating and forcing the build process to be reproducible for 15 Java applications without versioning packaged into 8 containers,
- Researched, evaluated, debugged and sometimes fixed various open-source tools written primarily in Go,
- Started from zero building up AWS-based Kubernetes infrastructure automated with Terraform/Terragrunt,
- Finished with VPN-accessible private clusters with integrated cloud controllers, cluster autoscaler, telemetry, ingress, CI/CD, local development,
- Rewritten the build process to spotify/luigi for a local execution and easier handover,
- Prepared a NixOS-based EC2 instance capable of running all the tooling to be used as a last-resort when local setup breaks,

Fresha

Warsaw, Poland

DEVOPS | DEVEX

Nov. 2021 - Oct. 2022

- Member of a team focusing on increasing development velocity through CI/CD process and developer's experience improvements,
- Successfully cut Datadog monitoring costs by a third through refining gathered data,
- Worked primarily on complete redesign and simplification of existing - organically acquired over the years - complex processes,
- The job involved identifying, measuring and debugging performance and operational issues on very large (30-60 envs, 20+ apps each, multiple deployments per hour) EKS cluster dedicated to staging environments,
- Set up new deployment and secrets management flow using: ArgoCD, External Secrets Operator and a set of Python scripts for the GitOps repository management & optimization,

BEC Poland

Warsaw, Poland

DEVOPS | CLOUD ENGINEER

July 2020 - Oct. 2021

- Introduced 5 man team to: Terraform, pytest and Terraform SDK,
- Introduced team to and provided guidance for custom Terraform providers implementations,
- Participated in design and implementation of company-wide Azure based cloud platform,
- Tested infrastructure with pytest and pytest-bdd (Python implementation of Behaviour Driven Development/Gherkin),
- Designed and implemented shared testing library to be used by the team and customers,
- Designed and implemented developer's environments using: Packer, Vagrant, VirtualBox, Azure DevTest Lab,

GFT Poland

Warsaw, Poland

KUBERNETES ADMINISTRATOR | DEVOPS | CLOUD ENGINEER

Jan. 2019 - June 2020

- Introduced 6-man team to Terraform and Kubernetes,
- Participated in fast-paced infrastructure development in a large team (tens of cloud engineers),
- Participated in development, automation and coordination of workflow across many programming teams and projects,
- Was the only person responsible for deploying, configuring and managing pre-production Rancher 2 based Kubernetes clusters,
- Implemented a cluster reconciliation & auto-scaling loop in Python deployed to AWS Lambda,
- Automated infrastructure development workflows including mass-execution, validation and automation for Terraform,
- Achieved close to zero-downtime deployments by working with development teams,
- Integrated a few systems with Okta identity provider,
- Coped with being forced to use the most available Istio features from the start without gradual implementation one-by-one,
- Used/integrated with: OPA Gatekeeper, Datadog, Artifactory, CircleCI, GitHub, Spinnaker,

Daftcode

Warsaw, Poland

PROJECT CTO | PYTHON DEVELOPER | LINUX ADMINISTRATOR | DEVOPS

Jun. 2016 - Dec. 2018

- Started as the most experienced backend developer on the team with some sysadmin skills, then gradually moved to full-time infrastructure administration and devops role,
- Developed a small Django backend application written by an intern into a dynamically growing project,
- Started by modernizing, redesigning and gradually reimplementing it without (user) interruptions on top of modern tooling,
- Migrated on-premise infrastructure to semi-automated environments (production and development) on top of AWS EC2,
- Streamlined deployments and in-app error gathering/reporting,
- Identified, then fixed bugs and accounting discrepancies using ELK stack data analysis,
- Achieved zero-downtime deployments,
- Implemented live performance monitoring and alerting in form of Kiosk-style dashboard at the office backed by Raspberry Pi,
- Implemented and hardened the infrastructure on top of kops-based Kubernetes cluster,

10Clouds

Warsaw, Poland

DJANGO / FULL-STACK DEVELOPER

Aug. 2015 - May 2016

- Created tests for then migrated an existing Django REST Framework & PostgreSQL tenants based SaaS from Python 2 to Python 3,
- Developed and maintained above mentioned backend and occasionally frontend
- Designed and implemented Django REST Framework based backend in another project,

JMR Technologies

Warsaw, Poland

LEAD PYTHON DEVELOPER

Nov. 2014 - Jun. 2015

- Was primary Python developer in a company newly adopting Python for selected projects,
- Designed and implemented of Django based CRM,
- Gave occasional assistance to the Odoo team,

Freelance project

Poland

FULL-STACK SOFTWARE DEVELOPER

Apr. 2014 - Jun. 2015

- Implemented and deployed Django REST Framework backed CMS/knowledge base,
- Implemented JavaScript (Dojo Toolkit 1) based desktop application (TideSDK, NW.js, then Electron) backed by aforementioned backend.

OPEN SOURCE CONTRIBUTIONS

- Go: [prometheus/prom2json](#): implement reading metrics from stdin or file (only URLs were supported),
- Go: [netbirdio/netbird](#) VPN: fixed and tested errors with network routing,
- Go+k8s: [kubectl drain](#) improvements helping with cleanly scaling down cluster to zero,
- Go+k8s: [gitops-engine/Argo CD](#) add proper handling when etcd hiccups (eg: GC) occur,
- Go+k8s: [helm/chart-testing](#): implementing passing of additional flags to helm command,
- Go+k8s: [rook](#): enabled support for running on NixOS by adding NixOS-specific PATH,
- Go+tf+k8s: [terraform-provider-kustomization](#) added handling of remaining kustomize flags,
- Go+TF: [terraform-provider-vault](#): improved handling of groups and policies assignments,
- Go+TF: created [daftcode/terraform-provider-scripted](#) as a first touch with Terraform and Go,
- Go+TF: created [nazarewk-iac/terraform-provider-custom](#) refined and properly designed implementation of above,
- Python+AWS: [Nike-Inc/gimme-aws-creds](#): large refactor to enable using the tool in CI and as a library,
- Nix: various contributions to and packaging fixes for [NixOS/nixpkgs](#),
- Nix+containers: [devenv](#): enable building containers in CI using Nix's Flakes,