# Nikolay Chakarov

## DevOps Engineer, Web Developer

Experienced DevOps Engineer and Web Developer with over 9 years of hands-on experience in developing scalable (web) applications, implementing automation solutions, and leading cloud migrations. Proven track record in enhancing system reliability and performance, skilled in a wide range of programming languages and DevOps tools. Passionate computer enthusiast and devoted father of



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## WORK EXPERIENCE

### DevOps, Developer DotNot

2022 - Present

Achievements/Tasks

- Developed a web hosting / VPS platform, increasing customer deployment speed by 50% and supporting over 10,000 active users.
- Construction of video surveillance systems, Video storage, Streaming of video (oneToMany)
- Implemented a secure VPN mesh network, enhancing overall system security. Led a successful migration of 100+ on-prem servers to AWS, reducing infrastructure costs by 35%.

## **Backup Automation Engineer** Union Industry

2023 - Present

Achievements/Tasks

- Design and implementation of multi-cluster storage solution with versioning, Erasure coding and tiring
- Automation and test of restore strategy
- Automation of Bare-Metal servers iLO configuration, Installation, OS preparation and Backup restoring

## IT Infrastructure Engineer Master Unity

2022 - Present

Achievements/Tasks

- Implement of k3s cluster with kubeVirt
- Automated provisioning on demand of VDI
- Lead the migration from desktop clients to thin clients

## Senior DevOps Engineer Amusnet Interactive

2022 - 2023

Achievements/Tasks

- Engaged in the recruitment process of a DevOps team. Mentoring a group of 6 DevOps interns (Junior DevOps')
- Integration of new Jenkins instance with proper LDAP, security policies, CaC and auto node provisioning
- Develop new Jenkins pipelines, Shared libraries with Groovy and Jenkin's DSL for better IaC
- Architecture and implementing of company wide GitOps strategy, on-premise RKE cluster, migration prod to EKS

## **LANGUAGES**

Bulgarian

Native or Bilingual Proficiency

English

Professional Working Proficiency

## **SOFT SKILLS**

Problem-solving

Teamwork

Work Ethic

Time management

Decision-making

Attention to Detail

## **PROJECTS**

#### **DotNot POS**

Designed, developed and implementing Web PointOfSales (POS) system specifically for DotNot's physical store operations, integrating a comprehensive warehouse management module and

#### **DNS Server**

Developed a Micro Service-based authoritative DNS server featuring lazy zone loading, dynamic resolves based on client IP/network. Implemented zone storage in S3 and direct logging into Elasticsearch, significantly improving scalability, fail-over resilience and MTTR.

#### Cockpit simple managment

Developed a suite of modules for Cockpit, extending the platform's capabilities with monitoring and control features for Docker, Ansible, Alarms and network-wide pings to verify the connectivity of all Cockpit members. Additionally, the integration of custom notes tasks, comments linked to JIRA enhances project management, collaboration and DevOps culture

#### WebDav fuseFS for qcow2 images

Architecture and development of custom fuseFS wrapper with webday as backend specially designed for storing, snapshotting, caching and versioning of in-use KVM qcow2 images.

#### Multi-Datacenter Kubernetes Cluster

- Setup automation of OS install with foreman/satelite, setup of Vmware cluster on the servers, Ansible and terraform automation of installing OpenShift Kubernetes cluster on the Vmware baremetal instances.
- 24 BareMetal servers in 3 datacenter with Ceph for HA Storage, backups of OS, VMware and openshift to FTP/S3
- Setup of internal network between datacenters with MikroTik routers with OpenVPN and wireguard

### **WORK EXPERIENCE**

# **Senior DevOps Engineer** Drafkings

2020 - 2022

Achievements/Tasks

- Implementation of SOX controls over more than 300 onpremise/cloud VMs with security policies, monitoring, and Jenkins/Puppet/Ansible automation
- Development of several BitBucket (self-hosted) Plugins with Java
- Development of an interactive Slack bot for notification and acknowledgment of alarms, E2E test, daily stats and ChatOps
- Migration of hundreds of VMs from self-hosted on-premise to GCP

# Web Developer UniversalCDN

2016 - 2020

Achievements/Tasks

- Development of a new internal back office application for logical management and grouping of more than 500 baremetal machines in 16 DataCenters around the world
- Improvements of the users' control panel to include options such as multiple origins and backup origins, S3 endpoints, PrePaid users types, integration with PayPal / Skrill and User API
- Development of several internal tools for auditing and aggregating logs and stats from Nginx, Apache, SWIFT, PHP apps, and APIs

### Owner / PC Repair man BUL359

2012 - 2016

Achievements/Tasks

- Computer and smartphone repair
- Developing custom web sites and web applications

## **PROJECTS**

#### Cloud Storage with Nextcloud, Minio

- Cloud storage hosted on several baremetals in Hetzner
- 2 Minio clusters (Tiered) each with 3 nodes on HA mode
- Backup to FTP storage
- Nextcloud behind a Caddy reverse proxy running in docker swarm on HA volumes backed up by minio and mounted with rclone and vfs cache

## PROFESSIONAL ENGAGEMENT

## **Angel**

### **Bulgarian Angels Club**

Tasks/Achievements

- Part of review committee
- Part of interview panel

## Part of Advisor Board

at several startups
Tasks/Achievements

- IT infrastructure, Planning and long-term effects
- Cost Optimization and Control

# Tutor DevOps / SysAdmin It Step bootcamp

Tasks/Achievements

- Tutor DevOps course for Beginners and Advanced
- Tutor System Administration course for Beginners

## SKILLS

#### Web / Development (Programming Languages)

PHP, HTML, CSS, JavaScript (NodeJS), Python, Groovy, Bash, PowerShell,

#### CI / CD

Jenkins, Ansible, Terraform (OpenTofu), Puppet, Gitlab CI, BitBucket CI, GitHub Actions, Bamboo CI, FluxCD, ArgoCD

#### Monitoring / Logging

Grafana, Prometheus, Loki, Node Exporter, Zabbix, PRTG, ELK stack (Elastic, logstash, filebeat, kibana)

#### Virtualization / Orchestration

Vagrant (virtualbox and libvirt), Proxmox, vmWare, Docker (dockercompose, swarm), kubernetes, k3s, Rancher (RKE1/2), Harvester (kubevirt), Openshift, LXD/LXC, Podman

#### DataBases

MySQL (MariaDB), SQLite, PostgreSQL, MongoDB (DocumentDB), DynamoDB

#### Storage

MinIO, NFS, SAMBA (CIF), FTP (SFTP, FTPS), LongHorn, Ceph, GlusterFS, WebDav, FuseFS

#### Others

DNS, Apache2, Nginx, Caddy, Traefik, HAProxy, S3 (s3fs), HLS, DASH, Kafka, RabbitMQ, Redis