# Aliaksei Sheshka NRE, SRE, infrastructure, networking

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Montreal, Canada

## Skills

## • Networking:

- Network engineering / operations / automation, NFV
- Muti-terabit scale network deployments Cisco, Juniper, Mellanox, Cumulus, SONiC, DriveNets
- Routing protocols: BGP, IS-IS
- MPLS, EVPN, SPRING / Segment Routing, QoS
- IRR, RPKI
- Arbor, Kentik, NetFlow/sFlow solutions; DDoS mitigation
- AAA, TACACS+, TOTP and releated services
- Firewalls, including iptables, nftables, ipf, ipfw
- Network management systems: LibreNMS, Zabbix, Cacti, Nagios/Icinga; SNMP
- Routing policy development, Internet peering

## • Programming:

- Go (Golang), python, C++, C, shell, awk
- netconf, restconf, gNMI, gRPC
- Network programming, concurrent programming

#### • Unix:

- Linux all major distributions (Debian, CentOS, Ubuntu, RHEL) + FreeBSD, OpenBSD
- SQL databases: PostgreSQL, MySQL/MariaDB, SQLite, ClickHouse
- DNS, DNSSEC
- Performance optimization, troubleshooting, custom install images, remote deployment
- all classic daemons: ssh, ftp, dhcp, nginx, smtp, imap and so on

## • Cloud:

- GPU computing
- KVM, containers, podman, docker
- Kubernetes: k8s, k3s, Cilium
- Infrastructure automation: cfengine, terraform
- Time series, Graphouse, Graphite, Grafana, Prometheus
- Log analysis: Fluent Bit, Graylog, Elasticsearch ELK, Kibana
- S3, MinIO and other object storages
- GitLab CI/CD, GitHub Action
- Deckhouse

# Certifications

- CKA, Certified Kubernetes Administrator
- CCNP, Cisco Certified Network Professional

# Work Experience

## Various Great Companies

Montreal, Canada

Infrastructure Automation, Networking, SRE, NDE

Dec 2004 - present

- Network and systems management, engineering and automation
- Cisco, Juniper, Mellanox, Cumulus, DriveNets deployments in the multi-terabit environments
- BGP, IGP policies developmenet, QoS
- Network policies development
- SLA / KPI infrastructure development
- Connectivity desings for exascalers
- Network / system programming and automation, NETCONF, YANG
- on-premise Kubernetes, object storages, CDN
- Virtualization / containerization (podman, docker etc)
- Development and maintenance of a backbone management software (ACL, BGP filters, communities, etc.)
- DDoS mitigation (Arbor and in-house solutions)
- AAA services, TACACS+, PAM
- IP address management software development
- Development and management of an anycast DNS infrastructure (both IPv4 and IPv6)
- Development of various network monitoring plugins both for open source and proprietary platforms
- Advanced log processing platforms
- Go, python, C++ programming