

# MAZ NASAB

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- **MSc in Computer Science - Networks and Distributed Systems**
- **Over 10 years** of experience designing and developing secure, robust and innovative network systems
- Experienced in **Network Systems** and **Services, Cloud** and **Data Center Networking**
- Proficient in **System** and **Network Development**(C, Golang, Rust) and **Automation**(Python, Ansible)
- Proficient in **Linux Network Stack**(eBPF/XDP, Netfilter/Iptables, Traffic Control, Socket API, IPVS)
- Advanced knowledge of **open source ecosystem** for building high available infrastructure

## RECENT EXPERIENCE

**Senior Software Engineer** | Tigera, Vancouver, Canada | May 2021 - Present

- Developing and maintaining next generation data plane of Calico CNI using eBPF/XDP
- Designing and developing features using Linux connection tracking, packet filtering and Traffic Control
- Developed a workload runtime security solution by monitoring syscalls and events using eBPF programs
- Introduced stateless firewall capability in Calico BPF data plane by developing XDP programs

**Network Security Architect** | Ericsson, Sweden | 2020 - 2021

- Secured web applications and mobile core networks using firewalls and DoS mitigation systems
- Provided best practices and automation guidelines for hardening Linux and Kubernetes clusters
- Designed and developed an iptables based micro segmentation firewall to save 200KUSD license cost

**Cloud Architect - Network & Virtualization Specialist** | Ericsson, Sweden | 2017 - 2020

- System responsible and designer of data center network for an IoT platform handling 50M IoT devices
- Led 10+ engineers to deploy and operate data center networks and services using VMware NSX
- Improved reliability and performance of low-latency and network-intensive virtual network functions
- Deployed load balancers, firewalls and proxies to satisfy functional and non-functional requirements

**Senior Software Engineer** | Enea Software, Sweden | 2015 - 2017

- Contributed to OPNFV project, a carrier grade flavor of OpenStack for network function virtualization
- Led a team of 3 engineers to design and develop a solution to virtualize customer premises equipments
- Official Linux Foundation trainer for Open Source Virtualization course covering Qemu/KVM and Docker

**System Developer** | Ericsson, Sweden | 2013 - 2015

- Transformed a TCP/HTTP proxy to a performant and scalable virtual network function on OpenStack
- Automated deployment for zero touch provisioning to reduce the deployment time from days to minutes
- Optimized throughput by tuning host and guest kernel and by bypassing kernel using DPDK

## **EDUCATION**

**MSc in Computer Science - Networks and Distributed Systems**

Chalmers University of Technology, Sweden | 2013