MAZ NASAB

Gmail | GitHub | LinkedIn

- 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/lptables, 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 run time security solution by monitoring syscalls and events using eBPF programs
- Introduced stateless firewall capability in Calico eBPF 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 equipment
- 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 Intel DPDK

EDUCATION

MSc in Computer Science - Networks and Distributed Systems

Chalmers University of Technology, Sweden | 2013