

EDUCATION

- KTH Royal Institute of Technology

Stockholm, Sweden

• *M.Sc. Eng. in Software Engineering of Distributed Systems; GPA: 4.20* [\(course list\)](#)

*B.Sc. in Information and Communication Technology* [\(course list\)](#)

2021 – 2024

2017 – 2021
- EXPERIENCE
- Red Hat

2024

• *Master's Thesis on benchmarking Open vSwitch* [\(source\)](#)

◦ **Performance Benchmarking:** Collaborated with a Senior Principal Software Engineer to develop and implement a benchmarking methodology for Open vSwitch on a single-node OpenShift cluster, leveraging predictive traffic management, XDP for packet timestamping, and custom daemons to measure latency, CPU utilization, and flow performance.

EY Cyber Security Mentorship Program

Stockholm, Sweden

• *Mentee*

◦ **Cyber Security:** Gained hands-on experience in risk management, risk assessments, and cybersecurity consulting; expanded professional network in cybersecurity.

2024

KTH

Stockholm, Sweden

• *Building Networked Systems Security* [\(source\)](#)

◦ **Network Security Setup:** Designed and deployed a secure network infrastructure in a collaborative group project with remote and on-site deployment. Integrated FreeIPA, FreeRadius, NextCloud, OpenVPN, and Snort using Docker for containerized services. Established site-to-site VPNs for optimized communication and implemented proactive threat monitoring.

2022

KTH Networked Systems Laboratory

Stockholm, Sweden

• *Bachelor's Thesis on benchmarking FRRouting* [\(source\)](#)

◦ **Performance Benchmarking:** Designed a benchmarking environment using ExaBGP, Python, and Open vSwitch to analyze FRRouting performance as a route server. Simulated BGP peers with ExaBGP, applied custom prefix filters, and automated data collection with Python. Evaluated routing performance under varying configurations to identify bottlenecks and optimize BGP processing.

2021

CDT Audio

Buellton, CA

• *Internship* [\(source\)](#)

◦ **Experience:** Gained hands-on experience in product assembly, contributed to marketing strategies, assisted with sales quotas, and created user manuals.

2016-2017

PROJECTS

• **Verbalizer:** Developed a cross-platform text-to-speech solution using Next.js, Node.js, Swift, Firebase Firestore, MongoDB, and Google Cloud Platform, with full-stack implementation and user authentication.

• **GitHub Backup System:** Developed a Linux-based personal backup system using Python, Bash, and the GitHub API, featuring AES encryption, file segmentation for GitHub size limits, and automated uploads via cron for long-term storage.

TECHNICAL EXPERTISE

Languages & Frameworks		Big Data & Containerization		Networking & CI/CD	
• Python	• Swift	• Hadoop	• Firebase	• BGP	• Open vSwitch
• Java	• SwiftUI	• MapReduce	• MongoDB	• FRRouting	• Selenium
• C	• JavaScript	• Spark	• Cassandra	• XDP	• Ansible
• Bash	• React	• Kafka	• Docker	• Wireshark	• Git Actions
• Elixir	• Express.js	• Redis	• Kubernetes	• Scapy	• Jenkins