EHSAN ESLAMI

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Summary

Network Engineer with **4+ years** of combined experience in nationwide ISP operations, enterprise infrastructure, and applied AI-powered network R&D. Certified **CCNP** Enterprise, **CCNA** Security, and **MCSE** with a Master's in Computer Engineering. Deep expertise in L2/L3 troubleshooting, BGP, OSPF, MPLS, Network Security, and Systems Administration on Cisco and Microsoft platforms. Proven track record of managing ISP backbones across 300 cities. Expert in developing automation and AI tools to modernize network operations, backed by advanced Python and ML skills. Eligible to work in Canada (valid work permit) and open to relocation.

Core Skills

Networking:	BGP, OSPF, EIGRP, MPLS, VLANs, STP, IPsec, SNMP, Active Directory, QoS, Firewalls, VPNs, SD-WAN
Infrastructure:	Cisco (IOS/XE), MikroTik, Windows Server, Linux (Ubuntu), Docker
Automation:	Python (Netmiko, Scapy), Network telemetry, Bash Scripting, REST APIs, Git
Monitoring:	Zabbix, Grafana, Wireshark, NetFlow, packet capture/PCAP
Tools:	GNS3, EVE-NG, VMware Workstation, SolarWinds, Winbox
AI & Data:	Machine Learning, Deep Learning, Traffic Classification, Anomaly Detection
Operations:	Incident Management, Technical Solution Design, Root Cause Analysis (RCA), Post-incident reports, Documentation (SOPs)
Soft Skills:	Teamwork, Communication, Ticketing, On-call Readiness, Shift work
Languages:	English / French / Turkish / Persian

Professional Experience

Relevant Experience

Network Operations Engineer — 2021 – 2023

Pishgaman Development Communications (National Tier-1 ISP), Tehran, Iran

- Managed network operations for a nationwide ISP backbone serving 300+ cities, ensuring 99.9% uptime.
- Engineered solutions for complex connectivity issues (BGP, OSPF, MPLS), reducing MTTR for critical incidents.
- Monitored nationwide backbone/edge/access networks using Zabbix and Grafana, coordinating incident response across day and night shifts to minimize service impact.
- Resolved 1500 tickets by troubleshooting L2/L3 connectivity, using monitoring dashboards, logs, and traffic analysis to identify root causes of service degradation, rather than just restarting devices.
- Standardized network operation procedures by creating comprehensive SOPs and runbooks, which reduced escalation rates and improved shift handover efficiency.

Network Researcher — 2023 – 2025

Concordia University, Montreal, QC, Canada

- Designed and implemented an AI-driven network traffic classification tool using Python and Machine Learning, achieving high accuracy in identifying encrypted traffic flows.
- Developed automated data pipelines to process traffic, extracting critical features for performance and security analysis.
- Simulated enterprise-scale networks to test anomaly detection algorithms, bridging the gap between theoretical models and practical, real-world network security.

Additional Experience

IT Support Specialist — 2020 – 2021

Maktabkhooneh (Tier-1 Leading Platform), Tehran, Iran

- Provided technical support and system administration for the users, ensuring reliable access.

Certifications

Cisco — 2018 – 2021
CCNP Enterprise | CCNA Routing & Switching | CCNA Security

Microsoft — 2020
MCSE (Windows Server 2016)

MikroTik — 2019
MTCNA | MTCRE | MTCUME | MTCTCE

Projects

Network Draw (Automated Network Topology Mapper)
- Developed a Python-based automation tool that autonomously scans network subnets via SSH/SNMP to discover active devices and link relationships (LLDP/CDP). (Demo).
- Uses Netmiko for CLI interaction to generate L2/L3 topology maps, reducing manual documentation efforts for NOC teams.

Capture
- Lightweight traffic capture/analysis app with easy NIC selection and per-packet or per-flow details (Demo).
- Reinforces packet-level and flow-level troubleshooting proficiency and PCAP handling in Python.

Education

Concordia University — 2023 – 2025
Department of Electrical and Computer Engineering — Montreal, QC

MASc in Computer Engineering (Supervisor: Prof. Walaa Hamouda)
Overall GPA: 4/4.3
Thesis: Network Traffic Classification Using Self-Supervised Learning and Federated Learning.

University of Tabriz — 2017 – 2022
Department of Electrical and Computer Engineering — Tabriz, Iran

BSc in Computer Engineering
Overall GPA: 3.82/4.3

Technical Research (Publications)

Network Traffic Classification Using Self-Supervised Learning and Confident Learning

E. Eslami, W. Hamouda, *IEEE Open Journal of the Communications Society, Open Access* (Oct. 2025).
DOI: 10.1109/OJCOMS.2025.3625534.

FedSSL-NTC: A Federated Self-Supervised Framework for Traffic Classification Under Privacy Constraints

E. Eslami, W. Hamouda, *IEEE Open Journal of the Communications Society, Open Access* (Nov. 2025).
DOI: 10.1109/OJCOMS.2025.3635689.

Teaching & Volunteer

Teaching Assistant — Winter 2024 – 2025
Courses: Computer Networks and Protocols | Telecommunication Networks — Concordia University

Instructor — Fall 2021
Course: Comp TIA Network+ — University of Tabriz

Teaching Assistant — Spring 2021
Course: Computer Networks — University of Tabriz

Volunteer & Session Chair Reserve — June 2025
IEEE International Conference on Communications (ICC 2025) — Montreal, QC