

# Muhammad Saad Shabir

 [github.com/msaadshabir](https://github.com/msaadshabir)  [msaadshabir.vercel.app](https://msaadshabir.vercel.app)  [linkedin.com/in/msaadshabir](https://linkedin.com/in/msaadshabir)  [saad.shabir@hotmail.com](mailto:saad.shabir@hotmail.com)

## EDUCATION

### Carleton University

*Bachelor of Information Technology - Network Technology*

**Ottawa, ON**

*Expected April 2026*

## COURSEWORK

**Network & Security:** Advanced Routing & Switching, Network Security, Automation, Network Management, Secure Mobile Networking

**Programming & Systems:** Data Structures, SQL & Databases, Web & Server Development, DevOps & System Foundations

**Emerging & Cloud Technologies:** Wireless Networks, Real-Time Systems, Cloud & Virtualization, IP Architectures

## EXPERIENCE

### AriesTECH

*Network Technician*

**Ottawa, ON**

*January 2024 - April 2025*

- Installed, configured, and maintained Cisco routers & switches; designed Layer 2/3 segmentation (VLANs, trunking, inter-VLAN routing) and implemented static, RIP, and OSPF routing to optimize traffic flow and improve security across the LAN/WAN.
- Ensured 99% network availability via proactive monitoring, rapid diagnostics (using packet-analysis / IOS tools), and regular preventative maintenance (firmware upgrades, ACL reviews, configuration backups).

## SELECTED PROJECTS

### **ZTAP** | *Go, eBPF, YAML Policy, Python, Prometheus, Grafana*

- Developed a zero-trust microsegmentation platform enforcing kernel-level network policies (Linux via eBPF, macOS via pf fallback), with hybrid cloud support and policy-as-code architecture.
- Integrated service discovery, RBAC authentication, AWS Security Group syncing, anomaly detection (ML), and observability (Prometheus/Grafana) for unified policy enforcement across on-prem and cloud.

### **pci-segment** | *Go, eBPF, pf, YAML, CLI*

- Built an open-source microsegmentation enforcer for PCI-DSS v4.0, automatically enforcing segmentation rules (Req 1.2/1.3) using kernel-level traffic filters (eBPF on Linux, pf on macOS) and producing auditor-ready reports.
- Designed a policy engine to validate PCI compliance, block unauthorized CDE access (zero false negatives), generate HTML/JSON compliance evidence, and provide a single binary with minimal dependencies.

### **cloud-netmapper** | *Go, AWS SDK, Graphviz, JSON, CLI*

- Implemented an automated network topology discovery tool for AWS environments, enabling visual mapping and structured inventory export.
- Integrated security-analysis routines to detect misconfigurations (e.g., overly permissive security groups, public EC2 exposure) and generate visual alerts.

### **CloudChat** | *Next.js, TypeScript, Tailwind, Clerk, Neon Postgres, Drizzle ORM*

- Developed a real-time microblogging platform (X-style) supporting posts (“clouds”), replies, likes, retweets, moderation, and admin tooling.
- Built authentication and user flows with Clerk, dynamic schema migrations, and moderation logic; implemented client-side image processing and server APIs for a smooth full-stack experience.

## SKILLS

**Languages:** Go, Python, C/C++, SQL, JavaScript/TypeScript, Bash, YAML

**Tools & Technologies:** React.js, Next.js, Node.js, Docker, AWS, Git, Linux, eBPF, Prometheus, Grafana, Wireshark

**Networking & Security:** Cisco IOS, VLANs, Inter-VLAN Routing, OSPF, ACLs, TCP/IP, Zero Trust, Microsegmentation, PCI-DSS

**Concepts:** DevOps, Data Structures, Algorithms, Machine Learning, Cloud Computing, Policy-as-Code, Observability