

MD ANISUR RAHMAN CHOWDHURY

Erie, PA / Anywhere in USA | 814.737.5770 | engr.aanis@gmail.com | chowdhur014@gannon.edu | [linkedin.com/in/md-anisur-rahman-chowdhury-15862420a](https://www.linkedin.com/in/md-anisur-rahman-chowdhury-15862420a) | github.com/ANIS151993 | marcbd.site

PROFESSIONAL SUMMARY

Network security and infrastructure professional with 7+ years of experience across ISP operations, enterprise IT, systems administration, and production support.

Hands-on background in firewall policy management, routing and switching, VPN, Linux and Windows Server administration, Active Directory, mail systems, IP-PBX, network monitoring, and hybrid infrastructure support.

Currently completing an M.S. in Information Technology at Gannon University while extending industry experience through research in serverless security, Zero Trust architecture, distributed infrastructure protection, and practical cloud defense.

CORE COMPETENCIES

Network Security Engineering; Firewall Policy Management; Routing and Switching; VPN, NAT, ACL, and Segmentation; Linux and Windows Server Administration; Active Directory and Identity Access Control; Mail Server and File Server Administration; IP-PBX and VoIP Infrastructure; Cloud Infrastructure and Serverless Security; Infrastructure Monitoring and Troubleshooting; Python, Java, JavaScript, C++, PL/SQL, JSON; Incident Response and Production Support; and CCNA, JNCIA, and MTCNA.

TECHNICAL SKILLS

Networking: TCP/IP, VLANs, Routing & Switching, NAT, ACLs, VPN (IPsec/L2TP/PPTP), Load Balancing, Failover, BGP, OSPF
Security: Firewall policy management, Zero Trust design, threat detection, traffic monitoring, intrusion prevention, IAM, WAF, incident response
Systems: Windows Server, Active Directory Domain Services (AD DS), Linux (Ubuntu/RHEL/CentOS/AlmaLinux), DNS, DHCP, Mail Services (Postfix/Dovecot)
Cloud & Virtualization: AWS (Lambda, IAM, WAF, EC2, S3 fundamentals), Proxmox, VMware ESXi, Hyper-V
Tools & Programming: Python, Java, SQL/PLSQL, LibreNMS, Power BI, Microsoft Office Suite; Devices: Cisco, MikroTik, Juniper, Fortinet, Cyberoam

CERTIFICATIONS

Cisco Certified Network Associate (CCNA) – 2024 | Juniper Networks Certified Associate (JNCIA) – 2022 | MikroTik Certified Network Associate (MTCNA) – 2019 | Active Directory Domain Services (AD DS) Training – 2014

PROFESSIONAL EXPERIENCE

Graduate Research Assistant | Gannon University – CIS Department, Erie, PA *Aug 2025 – May 2026*

- Researched and developed prototype logic for secure data transmission optimization between data centers, routers, and security controls, contributing to improvements in network throughput efficiency.
- Designed and tested secure path reservation algorithms and real-time traffic flow optimization models for enterprise-scale network environments.
- Authored and co-authored technical documentation and conference publications under faculty supervision, advancing research in network security and cloud infrastructure.

Cybersecurity Lecturer (CPT) | TAAS Services LLC, Remote, USA *Aug 2025 – Dec 2025*

- Delivered 15+ hands-on cybersecurity labs and lessons covering network defense, threat detection, firewall configuration, and vulnerability management for learners at varying skill levels.
- Developed curriculum materials and practical lab exercises aligned with industry certifications and real-world security operations workflows.

Senior Executive – Information Technology | S. Alam Group, Chittagong, Bangladesh *Dec 2021 – Jul 2024*

- Administered hybrid Linux/Windows server environments supporting 500+ enterprise users, including mail services (Postfix/Dovecot), web applications, and critical business systems.
- Managed Active Directory (AD DS) infrastructure for user provisioning, group policy enforcement, and role-based access control (RBAC) across multiple departments.

- Maintained and optimized IP-PBX / VoIP telephony systems, reducing call-quality incidents through proactive monitoring and configuration tuning.
- Planned and executed LAN/WAN infrastructure upgrades—wired and wireless—improving network reliability and reducing unplanned downtime.
- Monitored network performance using NMS tools (LibreNMS), identified bottlenecks, and resolved connectivity issues to maintain SLA-level uptime.

Technical Support Engineer – Networking | Link3 Technology Ltd., Chittagong, Bangladesh *Aug 2017 – Dec 2021*

- Provided Tier 2/3 technical support for corporate clients across Cisco, MikroTik, Juniper, Fortinet, and Cyberoam network devices covering 100+ enterprise accounts.
- Configured and maintained firewall security policies, NAT rules, ACLs, bandwidth control, IPsec/L2TP VPN tunnels, load balancing, and WAN failover setups.
- Troubleshoot and resolved radio-link and fiber connectivity faults; implemented structured escalation workflows that measurably reduced mean time to resolution (MTTR).
- Documented network topologies, configuration standards, and incident runbooks, improving team knowledge base and onboarding efficiency.

EDUCATION

Master of Science, Information Technology

Expected May 2026

Gannon University, Erie, PA | GPA: 3.93/4.00 | 27 Credits Completed

Bachelor of Science, Electronics & Telecommunication Engineering

2017

University of Science and Technology Chittagong (USTC), Bangladesh

RESEARCH PUBLICATIONS

Towards a Serverless Intelligent Firewall: AI-Driven Security and Zero-Trust Architectures

IEEE 12th International Conference on Cyber Security and Cloud Computing (CSCloud 2025). Sole designer and implementer; achieved 98% threat detection accuracy with low false-positive rate using LSTM-based temporal modeling on CIC-IDS-2017 dataset.

Auction-Based Dynamic Resource Allocation for Optimized Edge Computing in Distributed Networks

IEEE CSITSS 2025. Proposed and implemented an auction-theoretic model for efficient resource allocation in distributed edge computing environments.

AI and Cloud Computing in Business Systems: A Hybrid Model for Enhancing Enterprise Resource Planning

IEEE CSITSS 2025. Designed and evaluated an AI-driven cloud ERP framework integrating machine learning to enhance enterprise decision-making and operational efficiency.

KEY PROJECTS

Serverless Intelligent Firewall (AWS)

- Architected an event-driven cloud security system using AWS Lambda, IAM, and WAF; implemented automated threat response workflows reducing manual intervention for common attack patterns.

Secure Mail Server Deployment (Ubuntu Linux)

- Deployed a production-grade Postfix/Dovecot/Roundcube mail stack with full DNS hardening: A, MX, SPF, DKIM, and DMARC records configured to prevent email spoofing and phishing attacks.

Active-Active DC/DR Virtualization Lab (Proxmox)

- Designed and implemented a high-availability (HA) virtualization environment with disaster recovery planning, failover testing, and real-time performance monitoring for service continuity.

LANGUAGES

English (Professional Proficiency) | Bengali/Bangla (Native)