

# YASWANTH ALAM

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## EDUCATION

The George Washington University, Washington, DC

Jan 2022 - May 2023

Master of Science in Electrical Engineering (Specialization in Computer Networking)

GPA:3.73/4.0

Saveetha Engineering College, Chennai, India

Sep 2017 - Aug 2021

Bachelor of Engineering in Electronics and Communication Engineering

(1<sup>st</sup> Class with Distinction)

## TECHNICAL SKILLS

**Programming languages:** C, Python

**Tools:** Wireshark, Cisco CLI, GNS3, MS office (Word, Excel and Power Point), Vagrant, VMware, Virtual, Code Blocks, PuTTY, Splunk, Routers, Switches, Firewalls, LTM, F5, LAN Switching, Docker Containers, Clouds (Azure, AWS, Google, IBM, Oracle).

**Networking:** TCP/IP, UDP, VLAN, WAN, STP, Ethernet, 802.11, UDP, OSPF, EIGRP, RIP, DNS, DHCP, LAN, IPv4/v6 Subnetting, IP, IPsec, HTTP, ARP, SNMP, STP, LACP, NAT, VPN, QoS, WPA, WPA2, TFTP/FTP, SNMP, Network Automation, and JNCIA&CCNA Trained

**Operating Systems:** Linux, Windows, Ubuntu, Cisco IOS, Junos OS, Arista EOS

**Other Skills:** Windows Server, Active Directory, SAN&NAS storage, Load Balancer, Hypervisor's (Hyper-V, VMWare, Oracle)

## WORK EXPERIENCE

Graduate Teaching Assistant, Part Time-George Washington University (Washington DC)

Jan 2023 - May 2023

- Collaborated with the professor to synthesize supplementary materials in Communication Networks Class conducting office hours, grading assignments, and quizzes for 15 students, and gave seminars on networking protocols such as DNS, ISO-OSI.
- Help 15 students in the lab to set up an environment and working with various protocols and troubleshooting them.

Library Assistant, Part Time-George Washington University (Washington DC)

April 2022 - May 2023

- Provide the first point of contact, answers question, resolves problems, and explains and enforces policies for library patrons in person, by phone, email or by chat. Ensuring customers' needs are met on time on a daily basis for customer satisfaction.
- Troubleshoot and resolves connectivity and usage issues with various library equipment (AV, Computers, Peripherals), and remote access to resources. Provided network solutions and updates the documentation.

Research Assistant, Part Time-George Washington University (Washington DC)

Sep 2022 - Dec 2022

- Conducted research on enhanced version of **routers, servers, and switches** using **photonics** and machine learning.
- Identified and analyzed main challenges in photonic devices like memory, non-linearity, domain crossings, and footprint.
- Addressing the issues of cross talk and insertion loss, an approach combining MZI switch elements with SOA gates was proposed.

Associate Network Engineer, Full-Time – Lattice Network (Bangalore India)

Mar 2021 – Dec 2021

- Performed network monitoring and analysis, performance tuning and troubleshooting network problems, improving network efficiency by over 75%
- Prepared all 250 users by designing and conducting training programs, providing references and support.
- Developed and maintained standard operating procedures documentation to ensure 100% network reliability and efficiency.

Network Analyst, Internship- Pet Pooja (Bangalore India)

May 2020 - Aug 2020

- Ensured that company's network is running at its peak and provided support to customers who are experiencing network related issues and clearing of tickets using JIRA.
- Responding and troubleshooting alerts as well as participating in on-call rotation. Worked closely with other teams within the infrastructure group to analyze the application performance and build a scalable and economical work.

## ACADEMIC PROJECTS

Network Intrusion Detection using Packet level features

Sep 2022

- Developed a machine learning algorithm using KNN (K-Neural Networks) and **Decision trees** which can detect all the malicious packets that are flowing in the network.
- Implemented a hash algorithm to divide the unequal sized payload of the packets into equal sized blocks to detect the affected packets.

Automobile Based Black Box System using IOT ([Paper Published by Journal of Physics](#))

Apr 2021

- Designed and tested a paradigm deploying embedded C on AT Mega 2560 receives sensed data from various sensors. If any problem arises with the vehicle, GSM Module Sends accurate latitude and longitude locations to authenticated user.
- Provided development of safer cars, enhanced accident survivor care, assistance to insurance companies for auto crash reports, improved road safety, and promote lower death rate.

Working of routing protocols (EIGRP, OSPF and BGP) on Virtual Internet Routing Lab

Oct 2020

- Designed networks and implemented different routing protocols like EIGRP, OSPF, and BGP to analyze their working by performing various experiments on VIRL, a network simulation platform including virtual machines running Cisco's core operating systems.