**ROHAN MILIND KULKARNI**

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**EDUCATION**

**Southern Methodist University Jan 2021-Dec 2022**

M.S. in Telecommunications and Network Engineering (Graduating - Dec 2022) GPA: 4.0/4.0

**K J Somaiya College of Engineering, Mumbai University, India Aug 2013-May 2017**

B.E. in Electronics and Telecommunications GPA: 6.9/10.0

**TECHNICAL SKILLS**

* **Languages:** Python, Bash Scripting.
* **Operating Systems:** Windows, CISCO IOS, JunOS, LINUX (RHEL8, Centos, Ubuntu, Debian).
* **Technologies:** OSI & TCP/IP Model, IP Addressing, IPv4, Ipv6, MPLS, VLAN, VXLAN.
* **Networking Protocols and Concepts:** OSPF, ISIS, BGP, MPLS (L2 & L3 VPN), STP, MSTP, VLAN/Trunking, VTP, RSTP, VSTP, VXLAN/EVPN, RSVP, LDP, LAN, WAN, TCP, UDP, NAT/PAT, DHCP, ARP, DNS, HTTP, FTP, EtherChannel, Telnet, SSH, ACL, VRF.
* **Linux Based Concepts**: Linux basic commands, Boot process, Network Configuration, Linux storage, Compression, iperf, netstat, tracert, nslookup, crontab, File permissions, File Systems, Boot Process, Network Device, iptables.
* **Cloud Engineering and Dev-Ops Tools:** Basics of Ansible, Basics of Docker Containers and Kubernetes.
* **Software and Tools:** Putty, VMware Workstation, Oracle VirtualBox, EVE-NG, Wireshark, Cisco Packet Tracer.
* **CCNA Routing and Switching qualified**. Coursework in RHCSA, MPLS, SDN and SD-WAN.

**INDUSTRY EXPERIENCE**

**Network System Engineer, Calsoft INC., Pune, India** **Jun 2018–Aug 2020**

* Devised Test strategies for an edge computing product of a US based company, for features like Routing, Switching, VLAN, Port provisioning, Virtual Interface, Flow control ( with TCP and UDP traffic) and IPV6. Used iperf for TCP traffic.
* Was responsible for the Life-Cycle Management of the product, which included writing test plans covering Interface testing, Regression testing, Stress testing, Gray-box testing, Recovery testing, Load and performance testing of the product and other network protocols which helped enhance my technical documentation skills. In the second phase of the project, also performed API trigger-based testing of different parameters of the User Interface of the same product.
* Monitored and proactively debugged system related issues behavior on a day-to-day basis and ensured customer satisfaction by streamlining processes through Automation (using Bash scripting).
* Worked extensively on tools like Wireshark, JIRA, GNS3.

**Graduate Teaching Assistant (Advanced Network Design) Aug 2022-Dec 2022**

* Designed and emulated complex networks on Eve-NG, one consisting of 31 Routers and another Consisting of 6 Multilayer Switches and 9 hosts. Conducted and graded the labs for students of Advanced Network Design course, which covers Switching topics such as STP, MSTP, VLAN, VTP, EtherChannel and Routing topics such as OSPF, EIGRP, IS-IS, IBGP, EBGP, MPLS ,VPN, VRF, LDP. This course helped students getting broad idea of how network performs on an industrial platform and the administration of the same. Also, created course related documentation and graded the practical exams.

**PROJECTS AND PAPERS**

**Network Automation using Ansible Oct 2021**

* Created ansible playbooks to backup/save configuration of network. The YAML playbooks were organized in such a way that they ran on 2 separate inventories: Juniper and Cisco inventories having their respective routers in their inventories.
* Simulated this project in a GNS3 environment.
* Hosted a CentOS guest on a VM which subsequently be a part of the GNS3 emulated environment. In the GNS3 lab, the CentOS VM is setup as an ansible node where ansible is installed, the inventories, vars and playbooks are created.

# Analyzing Protocol using Wireshark Aug 2021-Dec 2021

* Examined certain packet captures to understand the field values and used filters to learn about the OSI model.
* Analyzed live traffic and captured packets at different layers. Deep packet analysis on IP, ARP, TCP, ICMP, DNS and DHCP.

**Routing and Switching May 2021**

* Implemented topologies on GNS3 and EVE-NG and implemented various protocols like Spanning tree, DHCP, Inter-VLAN routing, RIP, EIGRP, OSPF, BGP, IS-IS and advanced network design topics like MPLS, IPV6 and DMVPN.
* Monitored and analyzed these protocols and the whole network flow through Wireshark.