Arun Prakash Themothy Prabu Vincent

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Education

Master of Science, Telecommunications Engineering. GPA : 3.7/4.0 — Aug, 2016 - May, 2018
University of Texas at Dallas, Richardson,Texas

Bachelor of Engineering, Electronics and Communications. GPA : 8.7/10 — Aug, 2012 - May, 2016
Anna University, Chennai, India

Relevant Courses

Advanced Computer Networks, Algorithmic Aspects of Telecommunications Network, Mobile Computing Systems, Performance of Computer Systems and Networks, Web Programming Languages, Wireless Networks, Algorithms and Data Structures.

Skills

Languages	**:** C, C++, Java, SQL , HTML5, XML, CSS, BOOTSRAP, Javascript, jQuery, PHP
Network Management & Security	**:** Packet Tracer, GNS3, Wireshark, SNMP, ACL, IPSEC, GRE, VPN
Routing Protocols	**:** OSPF, EIGRP, BGP, RIP, Route Filtering, Redistribution, Summarization, Static routing
Switching	**:** LAN, VTP, STP, PVST+, RPVST+, Inter VLAN routing , Ether channels, MPLS
WAN Protocols	**:** PPP, HSRP, VRRP, IRDP, NAT, SNMP, SYSLOG, NTP, DHCP, CDP, DNS, NTP, TFTP, FTP
AAA Architecture	**:** TACACS+, RADIUS, Cisco ACS
Operating Systems	**:** Windows (98,ME,2000, XP, Server 2003/2008,Windows 7), Ubuntu, MacOS

Professional Experience

Network Engineer Co-Op, Bharat Sanchar Nigam Limited, India — Aug, 2014 - Jan, 2016

- Designed, configured and administered IPv4/IPv6 enterprise network infrastructure using Cisco routers and catalyst switches.
- Handled Network Monitoring and Packet capture tools like Syslog, NetFlow, SNMP and Wireshark.
- Configured STP for switching loop prevention and VLANs for data along with Configuring port security and inter-VLAN Routing.
- Configuring and troubleshooting of routing protocols RIP v1/v2, EIGRP, OSPF, IS-IS, BGP and MPLS.

Academic Projects – (University of Texas at Dallas)

- **Fog Computing -** The *Cloud Services* were extended to the users by installing fog servers which implements the functionality of cloud at the edge of the enterprise's network. The response time delay for the requests from IoT devices was decreased by 40% by distributing the service requests to fog servers. Fog functionality is implemented in Java (socket programming).
- **Network design proposal for campus LAN and DMZ using CISCO Routers -** The IP addresses were conserved by using class B subnetting for addressing plan for a campus LAN network. Resilience of the Network was improved by redistributing the RIP and OSPF routing protocols. The LAN network was designed and implemented using GNS3 software and CISCO routers and WireShark was used to monitor the network and perform troubleshooting.
- **Cloud Network Design proposal -** Configured FTP server and Social network server access control using ACL, and performed Secure Telnet configuration and Port-Security configuration. Enabled the TCP, UDP, SMTP ports to allow the traffic from one server to another server and performed the trace route to find out where the traffic is blocked by the firewall.
- **Datacenter Security Design proposal -** The Servers in Datacenter were protected by configuring NAT and Access Controlled List(ACL) on ports of Cisco IOS firewall Routers and Switches.
- **Cost Optimization for Network Design -** Linear Programming formulation of the *Multi-commodity Flow* problem using Java. Optimized the network cost by 70% using Dijkstra's Algorithm.
- **VLAN design with Cisco Infrastructure -** Configured for extension of VLAN from one network segment to other segment between Cisco catalyst switches. *Router-on-a-stick* was configured for inter-VLAN communication.
- **Unix v6 File System -** The file system is created and managed using free blocks and Inodes, higher storage capacity(2X) was achieved by manipulating the bits in Inodes. The project was implemented using C.

Academic Achievements & Publications

Design of a U-Slotted Microstrip Antenna for Indoor and Outdoor Wireless LAN published in Australian Journal of Basic and Applied Sciences, 9(15) Special 2015, Pages: 148-154".

Low Power - High Efficient Video Encoding for Image Quality Improvement in Battery-Operated Surveillance Camera" published in International Journal of Electrical and Electronics Engineers (IJEEE). Volume 07, Issue 02, July-December 2015, ICSTM-15

Certification

Cisco Certified Network Associate (**CCNA 200-125**) License 428805689106JMCG — May, 2017
Coursera Certified Software Defined Networking — Feb, 2016
Bharat Sanchar Nigam Limited **certified *Telecom Support Infrastructure Engineer*** — Dec, 2015