

Nikhil Tayal

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Raleigh, NC

Education

North Carolina State University (Master of Science in Computer Networking) - Anticipated 2018.

Courses - Internet Protocols, Switched Network Management, Design and Analysis of Algorithms. CGPA —

Maharaja Agrasen Institute of Technology (Bachelors in Information Technology) - 2016

Major Project - Bandwidth Recycling in IEEE 802.16 Networks. Aggregate Percentage - 70.7 %.

Internships

Trainee at Hughes Systique Pvt. Ltd. (June 2015 - July 2015)

Network intern at Track World Vacations Pvt. Ltd. (January 2015)

Intern at National Thermal Power Corporation Ltd. (June 2014 - July 2014)

Projects

Bandwidth Recycling in IEEE 802.16 Networks (January 2016- May 2016)

This project aims at recycling bandwidth in Wi-Max Networks. Base Station was assigned Complimentary Station to recycle the unused bandwidth. It comprised of four modules : Initialize Bandwidth, Allocate Bandwidth, Schedule Resource and Utilization. This project made use of NS2, and MySQL.

Software Defined Networking (and NFV) in Mobile and Wireless Networks (August 2015- Dec 2015)

Setup SDN infrastructure on a Linux machine, install OpenFlow protocols, install openDaylight controller for creating logically a control layer between the application and service layer and to develop custom application as per requirement. Tested the system for network performance using Mini-net and Wireshark tools. Bandwidth-on-demand configuration.

Open-IMS with VOIP Adaption (June 2015 - July 2015, Hughes Systique Pvt. Ltd.)

It is an open source implementation of call session control functions with home subscriber server. Installed openIMS core on Ubuntu, installed required packages. Configured DHCP and DNS settings. Used Web-min to configure DNS settings. Tested the system with IMS client and server. Verified by establishment of voice calls on android mobiles and studied the voice quality.

Up-gradation of Network infrastructure (January 2015, Track world vacations Pvt. Ltd.)

Replaced old NICs with new ones that have RJ-45 connectors, wireless adaptors. Installs PoE switch for IP telephony, VLANs for separating networks. Also Installed Router for Internet connectivity, DHCP configuration, DNS server, dynamic NAT.

Designing of LAN of our college (June 2014 - July 2014, NTPC Ltd.)

The Project is aimed towards designing of LAN under ISS (Info Structure Service)-{Server, Storage, Service, Security, and Networking}. Project included VLAN configuration on switches, DHCP configuration, NAT, ACL, OSPF routing Protocol, Server administration.

Skills and Achievements

Programming Languages : C/C++, Python, MatLab.

Operating Systems : Windows, Linux, Mac.

Tools and Protocols : Cisco CLI, Mininet, Wireshark, NS2, MySQL, OpenFlow, OpenDaylight.

Academic Achievement : **CompTIA Network+** Candidate ID: *COMP001020744618*.

CCNA (Routing and Switching) Cisco Id: *CSC012652375*.

Extra Curricular and Community Services

- Attended **Ground Zero International conference** on Information Security.
- Participated in **CompTIA ChannelCon webinar** on Internet of Things (IoT).
- Attended **Cisco webcasts** on various networking domains.
- Third position in **iclick (photography)** competition 2014 by Kaleidoscope India.
- Member of **Indian Youth Congress** since 2011 - **Managed cleanliness and Health** in the living areas.