

## NAINA CHATURVEDI

Houston, Texas • Voice: 832-946-2695 • Mail to: [chaturvedi.naina0412@gmail.com](mailto:chaturvedi.naina0412@gmail.com)

• Connect with me: <https://www.linkedin.com/in/nainachaturvedi04> GitHub: <https://github.com/Naina0412>

**Objective :** Looking for a challenging opportunity as an internship for Fall 2016/Spring 2017 and a full time opportunity from May 2017. I'm a passionate programmer interested in creating new, cool and challenging things.

I'm interested in successful design, development, implementation, troubleshooting and configuration in the field of **computer networks, software defined networking** and **software development**. I would be completing the Master's degree at University of Houston Main Campus by **May, 2017**.

### Research Paper Published in International Conference in International Journal of Computer Applications, New York

• Prof. Mrs. P.D. Kale, Naina Chaturvedi, Neha Vishwakarma, Priyadarshni Sivakumaran, *Trace File Analysis in Fibre Channel over Ethernet Environment: A Step Ahead*. ISBN: 9739380867303.

### Summer 2016 Research(Intern) Projects , Ideas and XSEDE boot camp :

#### 1. Implemented MPLS L3 VPN and MP-iBGP

**Areas covered:** MPLS, GNS3, VPN and iBGP.

#### 2. Implemented and research: Software Defined Networks in MPLS networks and BGP in SDN.

**Areas Covered:** SDN, MPLS, Linux, Python.

#### 3. Ongoing Research: Software Defined Networks in Raspberry Pi(sensor network)

**Areas covered:** SDN, Linux, Raspberry Pi.

#### 4. Simulated lab and research: Wi-Fi Localization and positioning in ISS

5. Attending XSEDE HPC summer boot camp'2016 [June 14-17th '2016] conducted by XSEDE along with the **Pittsburgh Super-Computing Center** and the **Center for Advanced Computing and Data Systems [CACDS]**

### Implemented Individual Research Project

#### 1. Network Management in Software defined Networks

**Areas covered:** Software Defined Networking, RYU controller, Linux, Python as programming language, Wireshark, Mininet.

#### 2. Implemented a cross communication between various routing protocols in GNS3 and analyzed the performance

**Areas Covered:** Routing protocols, GNS3, Wireshark, Cisco IOS.

#### 3. Implemented a Hadoop Map reduce program using Python

**Areas covered:** Hadoop, Linux.

#### 4. Network Traffic Analysis in Storage Area Network and Linux Kernel Compilation

**Areas Covered:** Fibre Channel Over Ethernet, SAN, Wireshark, Linux, Python.

#### 5. CISCO Packet tracer and IPv6 echo client/server and IPv4 address conversion project

• Implemented a small office network, routing protocols like **RIP, OSPF, EIGRP, BGP**, security features using **VLAN**.

• Implemented an IPv6 echo client/server using **Python** and a program to convert an IPv4 address to different formats.

6. Courses pursuing: **a.** Computer Networks from Stanford University **b.** Big Data from University of California, San Diego **c.** Python Programming by University of Michigan **d.** **Cisco Certified Network Associate (CCNA)** Routing and Switching.

### Education, Work Experience and Achievements:

• **Research Assistant:** University of Houston Main Campus, USA **August'15-Present**. **GPA: 3.9**

• **College Topper GPA: 3.9** Bachelor of Engineering, Computer Engineering completed in **MAY-2012**, Pune University, INDIA

• **Founder, Bit World, June 2016**

• **Software developer, Tata Consultancy Services (Sep'12-Jun'15):** Worked for two major banks (**Royal Bank of Scotland** and **Pittsburg National Corporation**)

• Selected for Business Management at Shailesh J. Mehta School of Management by **IIT Bombay**, 2011.

• President of Computer Engineering Student Association (CESA). • 1st Prize for Bournvita Quiz, **Cadbury India, ZEE TV**.

### Computer Skills, Specialties and Research Area's of Interest

• **Programming Languages:** Java and Python (**Expertise in Python**).

• **Operating Systems:** Linux (Fedora 14 and 8, Ubuntu 14.04LTS), Microsoft Windows.

• **Networking:**

- **Technologies/Research Areas of interest:** Python Programming, Socket Programming, Fibre Channel over Ethernet, Storage Area Network, Software Defined Networking, Mobile Cloud, Linux Kernel Compilation, Troubleshooting.
- **Switching:** VLAN, VTP, STP, ARP **Routing Protocols:** Static, RIP, OSPF, EIGRP, BGP. **Transport Layer:** TCP/IP, UDP
- **Application layer:** HTTP, DHCP, DNS, FTP, SIP, SMTP, SNMP, Telnet, TFTP and **Network Layer:** ICMP, IPv4, IPv6, NAT
- **Networking Tools :** GNS3, Nmap, Wireshark, Cisco Packet tracer, Linux Tools (mtr, tshark, iperf), tcpdump.

## **References**

**Abinas Roy**, Apple Inc.,USA  
Email: [Abinas\\_roy@apple.com](mailto:Abinas_roy@apple.com)

**Dr. Heidar Malki**, Chair of Engineering Technology Department, University of Houston Main Campus, USA  
Email: [hmalki@central.uh.edu](mailto:hmalki@central.uh.edu)

**Dr. Xiaojing Yuan**, Associate Professor, University of Houston Main Campus, USA  
Email: [xyuan@Central.uh.edu](mailto:xyuan@Central.uh.edu)

**Dr. Gary Richardson**, Instructional Professor, University of Houston Main Campus, USA  
Email : [grichardson@uh.edu](mailto:grichardson@uh.edu)

**Dr. Ricardo Lent**, Assistant professor, University of Houston Main Campus, USA  
Email : [rlent@uh.edu](mailto:rlent@uh.edu)

**Paige Prince**, University of Houston Main Campus, USA  
Email: [mpprince@uh.edu](mailto:mpprince@uh.edu)

**Prof Ms Pranoti Kale** (Vice-Principal), Bharati Vidyapeeth College of Engineering for Women, Pune, India  
Email: [kpranoti2005@yahoo.com](mailto:kpranoti2005@yahoo.com)

**Prof Pukale D.D** (Head of Computer Engineering Department), Bharati Vidyapeeth College of Engineering for Women, Pune,India  
Email : [pukaled@yaho.com](mailto:pukaled@yaho.com)

**Prof Sonali P. Kadam**(Associate Professor), Bharati Vidyapeeth College of Engineering for Women, Pune,India  
Email : [kadamsonali@rediff.com](mailto:kadamsonali@rediff.com)