

EDUCATION

M.S. Computer Science Computer Science GPA: 3.87	Stony Brook University, New York	December 2016
B.S. Computer Science Computer Science GPA: 3.65	LUMS, Pakistan	May 2014

TECHNICAL SKILLS

- Languages: Java, C, C++, Python, Bash, HiveQL, MySQL, HTML, CSS
- Unix, Kernel Programming, Big Data Analytics, Cloud Infrastructure, TCPdump, Network Protocols

ACADEMIC AND PROFESSIONAL EXPERIENCE

Research Assistant Networking Research Group	Stony Brook University	Sept 2014 – Present
<ul style="list-style-type: none">• Implemented a system that detects BGP hijacks for autonomous systems by doing real-time BGP monitoring. The system helps in reducing network downtime significantly.• Developed a BGP path prediction tool that finds short and cost efficient paths between autonomous systems. The work was published in a top tier conference, ACM IMC'15.		
Software Engineer, Intern Registry Services Lab	VeriSign Inc.	June 2016 – Aug 2016
<ul style="list-style-type: none">• Improved DNS resource utilization by discovering internet traffic trends using Big Data on millions of requests per second.• Conducted experiments to measure global DNS round-trip times globally. This identified areas around the world where DNS cache nodes installation could reduce latency and improve user experience.		
Software Engineer, Intern OpenStack Development Team	WanClouds Inc.	Jan 2014 – Aug 2014
<ul style="list-style-type: none">• Added benchmarking of a cloud metering tool (Ceilometer) to OpenStack. Coordinated with client's cloud infrastructure team every week to review progress and update goals. OpenStack is an industry leading open source cloud computing platform.		
Research Assistant Wireless Networks Group	LUMS, Pakistan	Aug 2012 – Dec 2013
<ul style="list-style-type: none">• Devised a novel algorithm to accurately detect losses in wireless networks using pattern analysis. Implemented this algorithm in an open source network driver to achieve up to 5 times higher speed. Published in top tier conference, IEEE INFOCOMM '14• Established the longest 802.11n WiFi link (4.4 miles) that can support real time communication. This was done by modifying Atheros Open source WiFi driver. Published in top tier conference, IEEE INFOCOMM '14		

ADDITIONAL EXPERIENCE AND AWARDS

- **Stony Brook Graduate Fellowship:** Awarded to top graduate school applicants
- **First Place, Startup Weekend Lahore:** Wi-Fast, a solution for boosting WiFi speed ([Link1](#) [Link2](#))
- **First Place, Speed Programming Competition:** Organized by Google, attended by 20+ colleges
- **Teaching Assistant:** Taught Distributed Systems, Computer Networks, and Intro to Programming

COURSEWORK

- Operating Systems
- Advanced Distributed Systems
- Service Oriented Computing
- Advanced Analysis of Algorithms
- Graduate Computer Networks
- Graduate Database Systems
- Data Structures in C++
- Software Engineering
- Advanced Computer Security