Nikhil Tripathi

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Indore (MP), India - 452 020
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EDUCATION

Doctor of Philosophy, Computer Science and Engineering
Indian Institute of Technology Indore, India
July 2014 - present.

Master of Technology, Information Technology
University of Hyderabad, India
July 2012 - July 2014.
CGPA: 9.59 CGPA on a scale of 10.

Bachelor of Technology, Computer Science and Engineering
Uttar Pradesh Technical University, India
July 2008 - June 2012.
Percentage: 72.22 %

Senior Secondary (Class 12 th),
ISC Board
March 2006 - May 2007.
Percentage: 82%

Higher Secondary (Class 10 th),
ICSE Board
March 2004 - May 2005.
Percentage: 78.16 %

RESEARCH INTERESTS

- Network Security
- Computer Networks
- System Security

Skills

- Programming Languages
    - C, Python, Core Java
- Network Management using Linux
- Raw Socket Programming using Python

WORK EXPERIENCE

- Worked as a research intern at Institute for Development and Research in Banking Technology (IDRBT), Hyderabad from June 2013-June 2014.
- Teaching Assistant, School of Computer and Information Sciences(SCIS), University of Hyderabad.
    - System Security, January 2014-April 2014
- Teaching Assistant, Department of Computer Science and Engineering, Indian Institute of Technology Indore.
    - Basic C Programming, July 2014-December 2014

- Teaching Assistant, Department of Computer Science and Engineering, Indian Institute of Technology Indore.

  – Computer Networks, January 2015-April 2015

- Teaching Assistant, Department of Computer Science and Engineering, Indian Institute of Technology Indore.

  – Basic C Programming, July 2015-December 2015

- Teaching Assistant, Department of Computer Science and Engineering, Indian Institute of Technology Indore.

  – Computer Networks, January 2016-April 2016

PROJECTS

- Worked on a research project entitled "An ARP-ICMP probe packet based scheme to prevent ARP Poisoning and IP Exhaustion attacks" as part of M.Tech at IDRBT, Hyderabad.
- Worked on a project entitled "COMPLETE WEB HOSTING SERVICES (configuration of DNS, WEB and MAIL servers)" as a part of B.Tech Final Year project.

SUMMER TRAINING

- One month summer training on "NETWORK MANAGEMENT USING LINUX" in July 2010.

PUBLICATIONS

Journals

- **Nikhil Tripathi**, Neminath Hubballi, "Detecting Stealth DHCP Starvation Attack using Machine Learning Approach", Journal of Computer Virology and Hacking Techniques, Springer, 2017 (Accepted).
- **Nikhil Tripathi**, Neminath Hubballi, "Slow Rate Denial of Service Attacks Against HTTP/2 and Detection", Computers & Security, Elsevier, 2017 (Accepted).
- Neminath Hubballi and **Nikhil Tripathi**, "An Event based Technique for Detecting Spoofed IP Packets", Journal of Information Security and Applications, Elsevier, Volume 35, 2017, Pages 32-43.
- Neminath Hubballi and **Nikhil Tripathi**, "A Closer Look into DHCP Starvation Attack in Wireless Networks". Computers & Security, Elsevier, Vol 65, Issue C, 2017, Page(s): 387-404

Conferences

- **Nikhil Tripathi**, Mayank Swarnkar and Neminath Hubballi, "DNS Spoofing in Local Networks Made Easy". Proceedings of 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS'17), 2017 (Accepted)
- Anuja Tayal, Neminath Hubballi and **Nikhil Tripathi**, "Communication Recurrence and Similarity Detection in Network Flows". Proceedings of 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS'17), 2017 (Accepted)

- **Nikhil Tripathi** and Neminath Hubballi, "A Probabilistic Anomaly Detection Scheme to Detect DHCP Starvation Attack". Proceedings of 10th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS'16), IISc Bengaluru, 2016, pp. 1-6.

- **Nikhil Tripathi**, Neminath Hubballi and Yogendra Singh, "How Secure are Web Servers? An Empirical Study of Slow HTTP DoS Attacks and Detection," 2016 10th International Conference on Availability, Reliability and Security (ARES), Salzburg (Austria), 2016, pp. 454-463.

- **Nikhil Tripathi** and Neminath Hubballi, "Exploiting DHCP Server-side IP Address Conflict Detection: A DHCP Starvation Attack". Proceedings of 9th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS'15), ISI Kolkata, 2015, Page(s): 1-3

- **Nikhil Tripathi** and B. M. Mehtre, "Analysis of various ARP Poisoning mitigation techniques: A comparison". Proceedings of IEEE International Conference on Control, Instrumentation, Communication and Computational Techniques (ICCICCT'14), 2014, Page(s): 147-152.

- **Nikhil Tripathi** and B. M. Mehtre, "An ICMP based Secondary Cache approach for the detection and prevention of ARP poisoning". Proceedings of 4th IEEE International Conference on Computational Intelligence and Computing Research (ICCIC'13), 2013, Page(s): 1-6.

- **Nikhil Tripathi** and B. M. Mehtre, "DoS and DDoS Attacks: Impact, Analysis and Countermeasures". Proceedings of IET National Conference on Advances in Computing, Networking and Security (NCACNS'13), 2013, Page(s): 93-98.

ACADEMIC ACHIEVEMENTS

- Received an honourable mention of 100 Euros for the paper presented at ANTS 2015.
- Selected for participating in 10th Inter-Research-Institute Student Seminar in Computer Science co-located with ACM India Annual Event 2016.
- 3rd best M.Tech research project award at IDRBT, Hyderabad.
- Best paper award of track at 2013 4th IEEE ICCIC conference.
- Best paper award of track at 2014 IEEE ICCICCT conference.
- Stood 3rd amongst 183 students at summer training program "NETWORK MANAGEMENT USING LINUX" held at IMT, Ghaziabad.
- Secured 98.14 percentile in Graduate Aptitude Test in Engineering (GATE 2012).
- MHRD fellowship for M.Tech course at University of Hyderabad during 2012-2014.

EXTRA-CURRICULAR ACTIVITIES

- Technical writer of magazine "Bihar Abhyuday".
- Participated in cultural events on 'Teachers day celebrations' at IDRBT in 2012.

LANGUAGES KNOWN

- English - Read, Write, Speak.
- Hindi - Read, Write, Speak.

PERSONAL INFORMATION

- Date of Birth: 17-June 1991
- Sex: Male
- Marital Status: Single
- Nationality: Indian