

# Ravindra Kumar

POSTGRADUATED · IIIT ALLAHABAD · CYBER LAW & INFORMATION SECURITY

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## Education

|           |                                      |   |                  |
|-----------|--------------------------------------|---|------------------|
| 2022-2024 | <b>M.Tech</b> (Information Security) | IIIT, Allahabad                         | <b>8.55/10.0</b> |
| 2014-2018 | <b>B.Tech</b> (CSE)                  | Government Engineering College, Bikaner | <b>67.9%</b>     |

## Work Experience

- Assistant Professor** GL BAJAJ INSTITUTE OF TECHNOLOGY, NOIDA Sept 2024 – Present
- Delivered applied training in Python scripting, Linux system administration, and network security fundamentals to 120+ students, improving batch performance by 25%.
  - Conducted lab sessions on Wireshark packet analysis, Nmap scanning, Ettercap-based man-in-the-middle (MITM) attacks, and PCAP file analysis to demonstrate protocol behavior and network vulnerabilities.
  - Introduced students to web security tools like Burp Suite and Nikto, alongside practical exercises in firewall rule configuration, network segmentation, and traffic filtering concepts.

## Publication

- Abhishek Vaish, **Ravindra Kumar**, Bobek Samo, Sternad Simona (2024). “Development of Cyber Security Platform for Experiential Learning”, **Journal of Cybersecurity Education, Research and Practice**. (2024.10.62915/2472-2707.1184)

## Research & Projects

- ShadowShield - Advanced Real-Time Firewall with Anomaly Detection** SELF May, 2025 - Curr
- Built a real-time firewall with DPI capabilities for enhanced traffic monitoring and security testing in simulated environments.
  - Automated GeoIP-based rule generation, blocking 90% of DDoS and port scan attempts during pentests.
  - Designed architecture for future integration with SIEM tools (Splunk) and machine learning-based threat prediction modules.
- System Design Analysis for Development of Cyber Security Education Platform** THESIS UNDER DR. ABHISHEK V. Mar, 2023 - Jun, 2024
- Designed and deployed a cloud-hosted ML-powered cybersecurity education platform (CySecLearn) with integrated collaboration and log management modules.
  - Implemented workflows for user access, logging, and security monitoring, enhancing platform stability and visibility.
  - Applied data analytics and TAM testing to optimize system performance and improve engagement and skill retention by 35%+.
  - Handled multi-environment deployment of CySecLearn with automated server configuration and reporting pipelines; outcomes published in a peer-reviewed cybersecurity journal.
- Web Security: Cyber Security Experiment Test Bag** PROJECT WITH DR. ABHISHEK VAISH Jan, 2023 - Jun, 2023
- Developed web security assessments using Acunetix and Nikto, identifying 15+ OWASP vulnerabilities in production systems.
  - Documented exploit chains and prioritized remediation workflows, improving patch turnaround time by 60%.

## Internship & Certification

- Cisco Networking Certification — Covered core networking concepts, IP routing fundamentals, security protocols, and network infrastructure assessment. Feb, 2025
- Completed *Google Cyber security Professional Cert.*, focusing on SIEM, incident management, network security, threat detection, risk assessment, and security operations. Aug, 2024
- Completed 2 Months *Internship at ISRO Jodhpur* on Project “Sentiment Analysis of Crowdsourced Data”. Jun, 2017 - Jul, 2017

## Positions of Responsibility

- Committee Member**
- Member & Reviewer of *3rd International Conference on Disruptive Technologies, ICDT-2025* Jan, 2025 - Mar, 2025
- Teaching Assistant**
- Information Security Law & Regulation*: Conducted hands-on sessions, seminars on ISG framework & IT Acts. Jan, 2024 - Jun, 2024
  - Network Security*: Designed attack-defense-based network simulations using GNS, Kibana, & DVWA tools. Jul, 2023 - Dec, 2023

## Skills

**Programming** C/C++, Python, Socket Programming, x86 Assembly      **Operating Sys.** Ubuntu, Arch Linux, Kali Linux, Windows

**Security Tools** Nmap, Wireshark, ELK, Burp Suite, Acunetix, Nikto      **Net & Debug Tools** GDB, tcpdump, netcat, iptables

## Extra Curricular Activity

- Led Effervescence'24 (IIIT-A's annual tech fest), managing crowd control and safety protocols Apr, 2024
- Volunteer for *Innovations in Software Engineering Conference, ISEC'23* held at IIIT, Allahabad. Oct, 2023