Mehul Singh

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Skills: Automation, CLI, CRM, CTI, Debugging, DLP, DR, EDR, Firewall, GRC, IAM, Incident Response, ITGC, ITSM, Linux/Unix, Networking, RCA, Reporting, Risk Advisory, Scripting, SIEM, Stakeholder Management, Threat Modeling, Threat Hunting, VAPT, Windows

Tools: Azure AD, BloodHound, Burp Suite, Confluence, Cymulate, Empire, Jira, MetricStream, Metasploit, Nessus, Nikto, Nmap, ProcessUnity, Proxychains, Responder, SentinelOne, ServiceNow, Splunk, SQLMap, Wireshark

Certifications

OSCP, OffSec (On the way!); Security+, CompTIA; Certified in Cybersecurity, ISC2; NIST RMF, LinkedIn; Cybersecurity Professional, Google; Certified Network Security Specialist, ICSI; Network Security Associate, Fortinet; Cybersecurity (Basics+Essential), Cisco; Problem Solving (Basic+Intermediate), HackerRank;

Statement of Summary

Cybersecurity professional with **3+ years** of experience in **threat hunting**, **incident response**, **security investigation**, and **vulnerability analysis**, and **2+** years **advising senior leadership** in a global enterprise. Experienced in **applied research**, **GRC advisory**, and **red teaming** with a focus on penetration testing, risk mitigation, adversary simulation, and **regulatory compliance**. Skilled in leveraging all pentesting tools and **applying frameworks** like OWASP and MITRE ATT&CK. Publishes technical insights as a **security blogger** while **researching emerging threats**, attack trends, and **vulnerability management** methodologies. Proven ability to **lead cross-functional teams**, translate complex risks into actionable strategies, and **deliver project outcomes** in collaboration with diverse stakeholders.

Education

Masters in Information Technology Security

Business&IT, Ontario Tech University, Oshawa, ON

Bachelors in Computer Science and Engineering

Engineering&Technology, Amity University, Noida, India

Work Experience

Security Analyst Co-op

Intact Financial Corporation

Jan - Apr 2025

Sep 2023 - May 2025

GPA: 4.10/4.30

2017-2021

GPA: 8.84

- Provided new workflow for enhanced classification metrics and assessment intake process, reducing assessment turnarounds by 20%.
- Developed queries based on Cyber Threat Intelligence inputs which decreased false positives by 15%.
- Streamlined risk registers, derogations, and third-party risk assessment-related activities which increased visibility of risks and reduced operation time by 20%.
- Executed periodical review procedures for IT security procedures by producing relevant reports and by following up with accountable stakeholders following OSFI, PIPEDA and PHIPA.
- Took extended assignments under red-team and worked with the WAF team during investigations and increased automated detection and response by 25%.
- Update IoCs and playbooks based on observed trends post data gathering, analysis and process reviews.

Graduate Teaching Assistant

Sep - Dec 2024

Advanced Communication Networks, Ontario Tech University

Advanced Network Security, Ontario Tech University

- Offer individual and group support to students, helping with assignments, projects, and coursework.
- Conducted technical lab sessions and managed individual and group-based tasks.
- Work with lead instructors to design and deliver engaging lesson plans aligned with institutional goals.

- Attended 10+ industry conferences and events to collaborate and network with experts, leading to better understanding of my teaching strategy and a 96% satisfaction level from students in the end-term survey.
- Assessed, graded, provided feedback, and monitored student progress continuously.

Risk and Control Analyst

2021-2023

Shell PLC, India

- Triaged 140+ security incidents and performed detailed rule and policy reviews as a Firewall subject matter expert, ensuring alignment with security protocols and risk tolerance thresholds.
- Performed vulnerability assessments of numerous applications using manual and automated tools, successfully identifying threats, and IoAs and advising mitigations, resulting in almost 20% lower KRIs.
- Co-led two firewall audits to successful outcomes, despite being an undergraduate hire.
- Adhered to standards like NIST SP 800-53, ISO 27001, and GDPR, ensuring that identified vulnerabilities and risks were documented and addressed in-line with compliance requirements.
- Collaborated and liaised with various cross-functional teams and MSSPs, and engaged with broader community to drive awareness regarding information security issues.
- Utilized ServiceNow and MetricStream to manage and track threat and vulnerability issues, closing them with thorough Findings' Management and updating Risk Registers on the enterprise tool.

Network Administrator Intern

May - Aug 2019

ONGC Ltd., India

- Tasked with setting-up network devices including Juniper MX, EX and SRX series into the core network.
- Gained teamwork experience while helping the core team of around 9 people in their daily activities.
- Monitored network traffic, identifying and resolving over 400 anomalies; improved system reliability by addressing false positives that reduced congestion and packet drops across the core network.

Projects & Activities (complete on GitHub)

Red-Team Roadmap Notes/Journey

2022 - Active

Technology: Toolkits, Unix, Windows, Kali, C, Bash, Python, Powershell,

Skills: Scripting, Pen-testing, TTPs, Threat Analysis, Logical Reasoning, Problem-Solving, Troubleshooting

- HackTheBox "Pro Hacker" with 80+ machines and challenges exploited.
- 50+ CTFs attended, consistently being in the top 30% (6th position in TACOPS 2025).

... on Github

Research Publications

An Empirical Study of Non-Cryptographically Secure Pseudorandom Number Generators

2020

IEEE

An Analytical Study on Cross-Site Scripting

2020

IEEE