

# Rahul Kumar

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<http://www.rahulkumar.life/> | <https://github.com/rahulkumarmmmut> | <https://medium.com/@rahulk2903>

## SKILLS/CERTIFICATIONS

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**Scripting Languages and Operating Systems:** Python, JavaScript, Shell, LaTeX, Linux, Windows and MacOS  
**Applications:** GitHub, Burp Suite, JIRA, Okta, Osquery, Neo4j, Qualys, Terraform, Splunk, Wazuh and IBM QRadar.  
**Standards and Practices:** OSINT, OWASP, SIEM, NIST, CIS, PCI DSS, ISO 27001, HIPAA, GDPR, SSL/TLS, AES, RSA, ECC.  
**Tools:** Docker, Nmap, Metasploit, Wireshark, Directory Traversing tools, OWASP ZAP, Hydra, Nessus and SQLmap  
**Certifications:** *CompTIA Security+*, *CompTIA CySA+*, *CCSK*, *EC-Council* : Certified Ethical Hacker, *Microsoft Technology Associate* : Security Fundamentals, *Microsoft Technology Associate* : Networking Fundamentals

## PROFESSIONAL EXPERIENCE

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**George Mason University (Research Assistant)** **Fairfax, Virginia | January 2024 – Present**  

- Led Cybersecurity and Data Analytics research initiatives, refining methodologies and enhancing data analysis. Managed multimedia content and project websites, effectively disseminating findings and leveraging advanced technologies.
- Utilized project management tools to create project timelines and coordinated teams to gather insights on technologies, ensuring timely delivery of critical data and fostering collaborations across academic and industry platforms.

**George Mason University (Graduate Teaching Assistant)** **Fairfax, Virginia | January 2022 – December 2023**  

- Implemented project-based learning and simulation techniques in Computer Networking and Cyber Security, boosting engagement for 70+ students each semester.
- Engineered Python-integrated Selenium tools for automatic grading, enhancing efficiency and precision by 30%.
- Mentored 500+ students, seamlessly incorporating cutting-edge digital security trends, leading to a 15% improvement in student grades compared to previous year.

**Cyber3ra (Cybersecurity Intern)** **New Delhi, India | May 2021 – August 2021**  

- Significantly enhanced data security and cryptographic operation speeds by 12% through the strategic selection and implementation of HSMs, elevating the organization's encryption capabilities.
- Enriched day-to-day cryptographic services for a global payments processor, managing SLAs and ensuring the high availability of encryption and key management solutions.

**JSC Golla Engineering Pvt Ltd (Security Analyst)** **Remote, India | June 2019 – April 2021**  

- Optimized and fortified metrics and reports on vulnerability management and assessments, implementing segmentation and isolation strategies that reduced cyber-attacks by 13%.
- Spearheaded technical support and expertly analyzed and SIEM alerts with IBM QRadar and Splunk, elevating threat detection by 10% through advanced network and log data analysis, enhancing cybersecurity defenses.
- Directed investigations into malicious email, led vulnerability assessments, coordinating with internal teams to identify threats. Conducted security training for 50+ staff, enhancing organizational security awareness.

## PROFESSIONAL PROJECT

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**WebCrawler (Research Analyst: George Mason University)** **August 2023 – December 2023**  

- Developed WebCrawler for private data extraction and identified 20+ security issues by detecting hidden links in source code comments for 1 million websites.
- Integrated a rotating proxy system with Python libraries (Requests, bs4, spacy), enabling unique IP and port assignments per server request and achieving 95% accuracy.

**Malware Analysis (George Mason University)** **August 2022 – December 2022**  

- Conducted comprehensive malware analysis of a keylogger in a secure virtual sandbox, employing Static and Dynamic Analyses and Reverse Engineering with tools like IDA Pro, OllyDbg, YARA, and FakeDNS to uncover its functionality.
- Identified critical vulnerabilities and risks exploited by malware, demonstrating expertise with tools like PEiD, Virus Total, and Process Monitor for in-depth malware fingerprinting, obfuscation detection, and network analysis.

## EDUCATION

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**George Mason University** **Fairfax, Virginia, USA**  
Master of Science in Information systems, Cybersecurity Engineering (GPA: 3.74) **August 2021 – December 2023**

**Madan Mohan Malaviya University of Technology** **Uttar Pradesh, India**  
Bachelor of Engineering in Computer Science (GPA: 3.10) **August 2017 – May 2021**