

Prateek Jain

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Dynamic and creative software engineer with over 8 years of experience of working in various technical domains like networking, software development, malware analysis and vulnerability analysis & penetration testing (VAPT).

Education

MS in Computer Science	Boston University	Boston, MA, USA	Sep 2022 – Dec 2023
Bachelor of Engineering in IT	Delhi College of Engineering	Delhi, India	Aug 2006 – Jun 2010

Skills

C/C++ | Java | Python | JavaScript | SQL | MongoDB | ELK Stack | MEAN Stack | WinDbg Debugger | Dependency walker | Ghidra | IDA disassembler | ProcDot | Yara | Nessus | Wireshark | OS Forensics | Burp Suite | Metasploit | Flink | Docker

Experience

Assistant Commandant (Technical) Central Reserve Police Force (CRPF) Feb 2014 – Mar 2022

- Spearheaded the development of high-performance Android and web applications, optimizing data collection, management, coalition, and analysis processes, resulting in increased efficiency and productivity.
- Displayed exceptional skill in analyzing and dissecting live malware, identifying IoCs, and effectively neutralizing the latest cyber threats to ensure the safety and security of the organization.
- Conducted thorough and meticulous security audits of systems using cutting-edge technologies such as OS forensics, Wireshark, and Nessus, providing critical insights and recommendations for improvement.
- Developed clear and concise guidelines for the safe use of electronic devices and social media, demonstrating a commitment to promoting responsible technology use across the organization.

Projects

- **Vulnerabilities in VS Code Extension (Feb 2023 – till date) (Project Proposal)**
Developing a system for detecting and reporting vulnerabilities in VS Code (and other IDEs) extensions and plugins, resulting in a significant reduction in the risk of security breaches.
- **Password Cracker (Oct 2022 - Nov 2022) (Project Report)**
Developed and led a project utilizing client-server architecture and Brute Force techniques to crack a 5-character MD5 hash in record time with dynamic web-based UI to add clients on the fly resulting in seamless scalability.
- **Cyber Security (Jun 2020 – Mar 2021)**
Leveraged deep technical expertise to conduct thorough security audits of complex systems across diverse locations throughout India, using cutting-edge methods to identify and mitigate potential data leakage points.
Employed state-of-the-art malware analysis tools and techniques to pinpoint infected files circulating within the organization, taking swift action to blacklist the IPs of server locations and substantially reducing data leaks by an impressive 90%.
- **Dashboards using Python (Dec 2019 – May 2020)**
Leveraged the power of Flask and Dash in Python to develop intuitive and visually appealing data visualizations, utilizing MongoDB or MySQL as the robust backend database for storing and querying data with ease.
- **Web Application Development (Feb 2019 - Aug 2019)**
Designed a cross-platform web app to streamline the field data collection process using MEAN Stack, enabling mobile and desktop data entry through a single interface.
- **ELK Stack Dashboard (Sep 2018 – Jan 2019)**
Developed a dynamic ELK stack dashboard for real-time analysis of complex and diverse datasets, with advanced filtering and one-click retrieval features and seamless integration of historical data.
- **Mobile Application Development (Sep 2017 – May 2018)**
Engineered a game-altering android app that streamlined data collection from field units, cutting down force's reaction time from 2 days to 2 hours, enhancing situational awareness and enabling swift action.
- **Records Digitization (Jun 2016 – Jun 2017)**
Optimized Inventory, Personnel, Hospital, and Weapon Management with sophisticated web apps using Django and SQLite. Rapid data collection and retrieval saved enormous man-hours and eliminated inefficiencies of paper-based systems.

Others

- Achieved the remarkable feat of being awarded the 'Home Minister's Cup' and 'Sword of Honor' for outstanding performance during basic training at CRPF Academy, Kadarapur, earning the title of 'Best Trainee Officer'.
- Important certifications – Linux Administrator, Database Administrator, Cyber security, Malware analysis.

Important Links

[Certifications](#)

[Professional
Awards](#)

[Academic Projects
\(Undergrad\)](#)

[Academic Awards](#)

[Co-curricular
Activities](#)