# SUSHMITA PAUL

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## EDUCATION

**Northeastern University**, Boston, MA | Fall 2019 - Present
**Khoury College of Computer Sciences** | GPA: 3.83
Candidate for a Master of Science in Cybersecurity
*Related Courses: Foundation of Information Assurance, Computer Systems Security, Network Security Practices, Information System Forensics, Software Vulnerabilities and Security*

**Goa University**, Goa, India | July 2014
Bachelor of Engineering in Electrical and Electronics

## TECHNICAL KNOWLEDGE

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|---|---|
| **Languages:** | Java, JSP, Spring Framework |
| **Web Technologies:** | HTML, CSS, JavaScript, AngularJs, Bootstrap |
| **Tools:** | Registry Viewer, Autopsy, FTK Imager, IBM RAD, Visual Studio, Splunk, SOAP, Active Directory, Putty, Docker, WinSCP, Metasploit, Nmap, Dirb, Nikto |
| **Pentesting Tool:** | Wireshark, Maltego, Hydra, Burp Suite, Kali Linux, John The Ripper, Spiderfoot, SQLMap |
| **Scripting Languages:** | Bash Scripting, Python |
| **Operating System:** | Linux, Windows |
| **Cloud Platform:** | Amazon Web Services (AWS) |

## ACADEMIC PROJECTS

**Self-Replicating Virus (Northeastern University)** | Fall 2020
- Designed and implemented virus using C that will infect one file at a time in the same directory it is executed. The infected file will keep on infecting other files based on its location, thus self-replicating & infectinf legitimate files.

**Gaining Access to OS and Application (CTF) (Northeastern University)** | Spring 2020
- Performed reconnaissance on a test application to gain access to the Operating system and application along with maintaining backdoor entry into application.

**Password Cracking Tool (Northeastern University)** | Fall 2019
- Developed an offline dictionary-based password cracking tool using Python. Multi-threading was implemented in the tool to improve speed and efficiency.

**Firewall and iptables (Northeastern University)** | Fall 2019
- Set up firewall and routed packets using iptables to protect internal network from the Internet.

**Enterprise Network Architecture Research Paper (Northeastern University)** | Fall 2019
- Wrote a paper on designing a secure enterprise network architecture that includes zoning, subnetting, network access control rules, and monitoring traffic using SIEM.

**Cryptographic Schemes (Northeastern University)** | Fall 2019
- Devised and implemented cryptographic schemes to encrypt and decrypt files using bash script

## WORK EXPERIENCE

**CyberArk Software Inc., Newton, MA**

*Information Security Services Intern* | September 2020 - Present
- Identified, debugged, and resolved technical issues faced by customer in Enterprise Password Vault (EPV) and Central Policy Manager Server (CPM) of CyberArk Privileged Access Security (PAS) Solution that includes Password Management & Storage; Privileged Account management; Discovery & Audit Scanning; and Event Notification Engine.

**Global Resilience Institute - Northeastern University, Boston, MA**

*Security Engineer* | January 2020 – September 2020
- Implemented security controls for users and administrators considering network architecture hosted on Amazon Web Services (AWS) using Network Access Control Rules (NACL) and Security groups, will reduce outsiders, as well as insiders, attack by 20%.
- Performed penetration testing and hardening of the email server, Linux, and Windows-based operating system.

**Northeastern University, Boston, MA**

*Teaching Assistant* | January 2020 – April 2020
- Assisted Professor in the course "Cyberspace Technology and Applications" to prepare assignments and its solutions.

**Infosys Limited, Pune, India**

*Technology Analyst* | July 2014 – August 2019
- Led a team to deploy a project, included development of Restful API using Java with Spring Framework for incentive detail page allowing customers to check respective incentive details, decreasing turn around time by 25%.
- Presented Proof of Concept using AWS, consisted of scheduling a reminder for members to record health vitals using Alexa and saving recorded vitals in Dynamo DB, enabling providers to remotely monitor vitals of members (Patients).