

# SUSHMITA PAUL

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## EDUCATION

|  |                     |
|--|---------------------|
| <b>Northeastern University</b> , Boston, MA  | Fall 2019 - Present |
| <b>Khoury College of Computer Sciences</b>   | GPA: 3.778          |
| Candidate for a Master of Science in Cybersecurity   |                     |
| <i>Related Courses: Foundation of Information Assurance, Computer Systems Security, Network Security Practices, Information System Forensics</i> |                     |
| <b>Goa University</b> , Goa, India   | July 2014           |
| Bachelor of Engineering in Electrical and Electronics  |                     |

## TECHNICAL KNOWLEDGE

|                                 |  |
|---------------------------------|--|
| <b>Languages:</b>               | Java, JSP, Spring Framework  |
| <b>Web Technologies:</b>        | HTML, CSS, JavaScript, AngularJs, Bootstrap  |
| <b>Tools:</b>                   | Registry Viewer, Autopsy, FTK Imager, IBM RAD, Visual Studio, Splunk, SOAP, Active Directory, Putty, Docker, WinSCP, Metasploit, Nmap, Dirb, Nikto |
| <b>Pentesting Tool</b>          | Wireshark, Maltego, Hydra, Burp Suite, Kali Linux, John The Ripper, Spiderfoot   |
| <b>Scripting Languages:</b>     | Bash Scripting, Python   |
| <b>Operating System:</b>        | Linux, Windows   |
| <b>Cloud Platform</b>           | Amazon Web Services (AWS)  |
| <b>Coursera Certifications:</b> | Usable Security, Launching into Machine Learning, Intro to Tensor Flow (Coursera)  |

## ACADEMIC PROJECTS

|   |             |
|---|-------------|
| <b>Gaining Access to OS and Application (CTF) (Northeastern University)</b>   | Spring 2020 |
| <ul style="list-style-type: none"><li>Performed reconnaissance on a test application to gain access to the Operating system and application along with maintaining backdoor entry into application.</li></ul>   |             |
| <b>Forensic Case Study of Windows Laptop(Northeastern University)</b>   | Spring 2020 |
| <ul style="list-style-type: none"><li>Performed an analysis on a digital evidence to determine case in-hand using windows registry hives, and shellbags.</li></ul>  |             |
| <b>Firewall and iptables (Northeastern University)</b>  | Fall 2019   |
| <ul style="list-style-type: none"><li>Set up firewall and routed packets using iptables to protect internal network from the Internet.</li></ul>  |             |
| <b>Enterprise Network Architecture Research Paper (Northeastern University)</b>   | Fall 2019   |
| <ul style="list-style-type: none"><li>Wrote a research paper on designing an enterprise network architecture, includes network tiers to separate internet-facing system from internal network, network access control rules to route traffic, security devices to detect intrusion, using SIEM for management zone and, assigning IP address subnet to zones.</li></ul> |             |
| <b>Cryptographic Schemes (Northeastern University)</b>  | Fall 2019   |
| <ul style="list-style-type: none"><li>Devised and implemented cryptographic schemes to encrypt and decrypt files using bash script</li></ul>  |             |

## WORK EXPERIENCE

|   |                         |
|---|-------------------------|
| <b>Global Resilience Institute at Northeastern University</b>   |                         |
| <i>Security Engineer – Part-Time</i>  | January 2020 - Present  |
| <ul style="list-style-type: none"><li>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%.</li><li>Designed and executed security controls for internal email application hosted on Amazon Web Service (AWS) EC2 instance along with monitoring of mail traffic, reducing phishing emails by 40%.</li><li>Updating and maintaining certificate of application website ensuring security of application.</li></ul>  |                         |
| <b>Infosys Ltd., Pune, India</b>  |                         |
| <i>Technology Analyst</i>   | July 2014 – August 2019 |
| <ul style="list-style-type: none"><li>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%.</li><li>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).</li><li>Designed and developed the Web page of Member Portal using AngularJS and Bootstrap for customers to view treatment, funds claimed by provider and details of payment in terms of copay, deductibles, and coinsurance, , thus improving user Experience by 40% as per customer's review.</li></ul> |                         |