# Prachi Oza

Hyattsville, Maryland

Cybersecurity expert with two years of experience in penetration testing, network security, and software engineering. Focused on contributing technical proficiency and proactive security measures to safeguard digital ecosystems. Eager to bring a results-driven approach to a dynamic environment and contribute to enhacing cybersecurity.

### **EDUCATION**

## University of Maryland

College Park, Maryland

Master of Engineering in Cybersecurity, GPA: 3.9

Aug, 2021 - May, 2023

• Coursework: Hacking of C programs and Unix binaries; Penetration testing; Cloud Security; Networks and Protocols; Network Security; Secure Coding for Software Engineering; Digital Forensics and Incidence Response

### Nirma University

Ahmedabad, India

Bachelor of Technology in Computer Engineering

Sept, 2016 - June, 2020

• Coursework: Software Engineering, Database Management Systems, Web Security, Advanced Data Structures

## Work Experience

## University of Maryland

College Park, Maryland

Grader Assistant

 ${
m Feb},\ 2023-{
m May},\ 2023$ 

- Assisted Dr. Josef Schaff for the course Machine Learning Techniques applied to Cybersecurity of 20 students, in grading coursework, lab-work and examinations pertaining to regression techniques, malware detection, and reinforcement learning.
- Developed a Python environment to enhance grading efficiency and optimized output analysis.

#### Bonum Technologies LLC

College Park, Maryland

Network Specialist

July, 2022 - Aug, 2022

- Day-to-day monitoring of the company's network server and infrastructure- including the firewall and network configurations, reducing downtime by 35%.
- Conducted troubleshooting and prepared detailed technical reports.

#### Proclink Consulting Services LLP

Ahmedabad, India

Cybersecurity Intern

Jan, 2020 – June, 2020

- Designed a vulnerability scanner for industrial control systems (SCADA & DCS) using tools from Kali Linux and Python language by incorporating 3 scanning techniques.
- Executed penetration testing plan, leveraging vulnerability exploitation techniques.

#### PROJECTS

#### Cloud Security | AWS, Azure Active Directory

Aug, 2022 - Dec, 2022

- Devised a cloud migration strategy based on a provided scenario using EC instances, VPCs, Load Balancers, NACL and security groups.
- Implemented resilience strategies against security attacks by incorporating IAM, backup and patching strategies.

Secure Code Review | Mitre CWE, SonarQube, Vulnerability Assessment, Git

 ${
m Aug,\ 2022-Dec,\ 2022}$ 

- Conducted a secure code review of a consumer-ready software application and detected over 10 OWASP Top Ten vulnerabilities by using tools such as SonarQube, Snyk and Roslyn analyzer to detect the issues; utilizing Docker to initialize an analyzer.
- Identified the techincal impact of vulnerabilities to successfully make appropriate recommendations, improving security by 70%.

#### Penetration Testing | Nmap, Metasploit, Threat Hunting

Aug, 2021 - Dec, 2021

- Performed red team vulnerability assessments in a team of 3 to obtain access to the administrator account. Also, discovered unpatched security flaws and unobscured AWS S3 bucket credentials.
- Created a detailed technical report highlighting all the TTPs identified, findings, methodology used and proof of concept scenarios.

## TECHNICAL SKILLS & CERTIFICATIONS

Certifications: Security + (CompTIA) - Expected Nov. 2023, Certified in Cybersecurity (ISC2)

Languages: Java, Python, C, C#, SQL, PHP, JavaScript, HTML/CSS, PowerShell, Shell Scripting

Frameworks & Standards: Bootstrap, Wireshark, Identity & Access Management, PCI-DSS, NIST, ISO 27000 Series, OWASP Top Ten, AWS Linux, Amazon Web Services, AWS Security

Tools & Software: Nmap, Metasploit, BurpSuite, Nessus, Splunk, GDB, SonarQube, Snyk, Git, Docker, Visual Studio, Tenable, IDS/IPS, SIEM tools, Incident Handling, Forensic Analysis

Security: Network Protocols, Vulnerability Management, Penetration Testing, Cloud Security, Information Assurance,

Cryptography, MFA, OAuth, RBAC, VPNs, Threat Modeling, TCP/IP Protocols