

Ashok Reddy Medikonda

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OBJECTIVE

Innovative cybersecurity professional with 6+ years of experience in application security, penetration testing, and software development. Seeking to join as an Application Security Engineer. Strong communicator with excellent communication skills, adept at managing incident response, integrating security into DevOps workflows, and securing Android and iOS applications. Experienced in leading teams, managing risks, and delivering on commitments within an Agile Software Development Lifecycle. I possess in-depth knowledge of OWASP Top 10. Key highlights include:

- Conducting comprehensive penetration tests across diverse web applications, networks, web services API, and mobile applications (Android and iOS).
- Proficiently identifying vulnerabilities and weaknesses using industry-standard tools like Metasploit, Nmap, and Burp Suite.
- Applying versatile testing methodologies such as black-box, grey-box, and white-box testing for evaluating system security.
- Meticulously analyzing web applications to uncover potential security flaws in input validation, session management, authentication mechanisms, output encoding, encryption, and privilege escalation.
- Expertise in identifying and exploiting common web application vulnerabilities like SQL injection, XSS, CSRF, and path traversal.
- Conducting thorough network infrastructure analysis to fortify defense against potential attacks.
- Implemented and maintained intrusion detection systems (IDS) and intrusion prevention systems (IPS) to safeguard against cyber threats.
- Managed firewall configurations to control and monitor traffic, ensuring network security.
- Proficiency in wireless network penetration testing, including Wi-Fi and Bluetooth security evaluation.
- Conducting forensic analysis using network traffic with Wireshark, memory analysis with Autopsy, USB, disk, and email forensics.
- Understanding of Security Operation Center (SOC) and incident response protocols.
- Maintained up-to-date knowledge of emerging cyber threats within the information security domain and contributed to the development and implementation of business continuity management strategies.
- Ensured excellent customer service by addressing security concerns and providing timely solutions.
- Currently preparing for OSCP certification to enhance skills in ethical hacking.

EDUCATION

University of Louisiana at Lafayette

January 2023 – May 2024

Master of Science in Computer Science, GPA: 3.5/4.0

Lafayette, LA

Relevant Courses: Network Security, Application Security, Computer Networks, Machine Learning.

Sri Mittapalli College of Engineering

June 2013 – June 2017

Bachelor of Engineering in Electronics and Communication Engineering

JNTU-Kakinada, India

EXPERIENCE

Research Assistant

February 2023 – Present

University of Louisiana at Lafayette

Lafayette, LA

- Optimized Zigbee communication for solar panel sensor data, ensuring robust security through in-depth analysis.
- Analyzed security specifications by NERC (North American Electric Reliability Corporation) for the protection of critical infrastructure.
- Developed the blocks of GNU Radio for radio signal analysis, creating a flexible toolkit for security researchers.
- Conducted communication sniffing to find holes and threats in ZigBee networks using GNU Radio and the USRP B210.
- Carried out experiments on replay packets and DoS (Denial of Service) attack simulations on ZigBee networks, identifying and addressing security flaws.
- Ensured OT cyber assets met regulatory requirements and industry best practices, focusing on NERC CIP standards.
- Knowledge of security, risk, and control frameworks, standards, and best practices such as ISO 27001 and 27002, SANS-CAG, ITIL, NIST CSF, NIST 800-53
- Supported department projects, including new hardware deployments, software upgrades, and capability enhancements.

- Strong ability to work in cross-functional teams and excellent communication skills.
- Utilized SIEM tools to monitor configuration baselines, security monitoring, logging and analysing security incidents.

Senior Cyber Security Analyst

September 2019 – February 2023

Cyber Excellence Academy Pvt. Ltd

Hyderabad, IN

- Application Security, Problem-Solving, Report Writing, Communication, DAST & SAST, OWASP Top 10, ISMS, Business Continuity Management, PCI DSS compliance.
- Collaborated with business units to remediate identified vulnerabilities and managed project tasks effectively.
- Utilized PowerShell for scripting and automation tools for vulnerability scanning and remediation.
- Analyzed data from Nessus and Qualys for vulnerability remediation.
- Conducted security assessments of online applications, prioritizing vulnerabilities based on criticality.
- Conducted in-depth research on open source vulnerabilities, understanding their impact on software security.
- Provided security training to the internal team on common vulnerabilities and code review issues.
- Collaborated closely with full stack developers to identify and address security vulnerabilities within software applications.
- Coordinated LAN/WAN network security management and assessments.
- Participated in disaster recovery planning, preparation, and testing.

Senior Software Developer

June 2017 – September 2019

Maktron Global IT Solutions Pvt. Ltd

Hyderabad, IN

- Developed and maintained web applications using SQL Server 2014, ASP.NET, and C#.
- Worked throughout the entire project from gathering software development lifecycle (SDLC) requirements to deployment.
- Built web applications using Content Management Systems (CMS) such as WordPress and Joomla.

CERTIFICATIONS

Certified Ethical Hacker, EC-Council - August 2020

Windows Kernel Exploitation, Nullcon-GOA - September 2022

Penetration Testing Internship, Virtual Testing Foundation - Oct-Dec 2021

Offensive Security Certified Professional (OSCP) - Expected June 2024

SKILLS

Languages: Python, Bash, SQL, C#, Perl, JavaScript, HTML, CSS, ASP.NET, PHP, Ruby, Lua

Operating Systems: Windows, Ubuntu, Kali Linux, Linux

Databases: Microsoft SQL, MySQL, Oracle, PostgreSQL

Security Frameworks: OWASP Top 10, OWASP Testing Guide, CWE 25, SANS 25, NIST Framework

Vulnerability Management: Vulnerability and Threat Analysis, Malware Analysis, Risk Management

Penetration Testing: Metasploit, Nmap, Wireshark, Dirbuster, enum4linux, smbclient

Static and Dynamic Security Testing: Burp Suite, OWASP ZAP, Nessus, Qualys, Postman, MobSF, ADB shell

Scripting and SOC: Python, Unix scripting, PowerShell, Splunk

IDE Tools: Visual Studio code, PyCharm,

Protocols: FTP, SSH, HTTP, HTTPS, TCP/IP, UDP, DHCP, DNS, SMB, LDAP

Productivity Tools: Microsoft Office 365

ACHIEVEMENTS

Medal of Excellence for developing Digital Learning Platform - Cyber Excellence Academy