

Nandakumar Vuppalapati

(424)-366-6034 | vuppalapatinandakumar@gmail.com | www.linkedin.com/in/nandakumar-vuppalapati-12b41932a

SUMMARY

Driven and dedicated Master's student in Computer Science, graduating December 2025, with a robust technical foundation in cybersecurity, cryptography, certificate lifecycle management, and cloud security. Proficient in Python and PowerShell for automation and problem-solving, with a deep understanding of securing modern cloud platforms like Azure and Microsoft 365. Highly committed to protecting critical systems and data, with a sharp focus on emerging threats, compliance, and innovative security practices. Actively seeking opportunities to apply my knowledge, drive impactful solutions, and grow as a cybersecurity engineer within a forward-thinking, security-focused organization.

TECHNICAL SKILLS

Cybersecurity Foundations: Public Key Infrastructure (PKI), TLS/SSL, Cryptography Principles, Certificate Lifecycle Management, Data Protection, Incident Response Concepts.

Programming and Automation: Python (scripting), PowerShell (automation fundamentals), Bash (Linux command-line basics).

Libraries & Tools: NumPy, Pandas, Scikit-learn, OpenCV, NLTK, Git, Docker.

Cloud Security Awareness: Microsoft Azure, Microsoft 365, AWS (security concepts and best practices).

Security Tools and Technologies: Wireshark (network traffic analysis), Nmap (network scanning), Splunk (SIEM basics), Burp Suite (web vulnerability testing), Nessus (vulnerability scanning), Active Directory Certificate Services (ADCS - theoretical knowledge), Venafi (familiarity), Power BI (data visualization), Power Automate (workflow automation).

Operating Systems: Windows, Linux (Ubuntu, Kali Linux basics), macOS.

Core Competencies: Analytical Thinking, Problem-Solving, Attention to Detail, Effective Communication, Adaptability.

PROJECTS

AES-Encrypted Password Manager

Jan 2024 – May 2024

Cybersecurity Project – Python, SQLite, Tkinter, Crypto

- Developed a secure password manager utilizing AES-256 encryption for protecting user credentials.
- Integrated SQLite for encrypted credential storage and built a Tkinter GUI for user interaction.
- Focused on secure authentication and password management, ensuring data confidentiality.

Network Vulnerability Scanner

Aug 2024 – Dec 2024

Cybersecurity Project – Python, Nmap, Wireshark

- Created a network scanning tool using Python and Nmap to detect open ports and services.
- Analyzed network traffic with Wireshark to identify vulnerabilities and assess potential security risks.
- Designed the tool to support basic intrusion detection and vulnerability assessment.

EDUCATION

University of South Dakota

M.S. in Computer Science, Artificial Intelligence

Vermillion, SD

Jan 2024 – Dec 2025

AP IIIT RGUKT RK Valley

Mechanical Engineering

Andhrapradesh, India

Aug 2019 – May 2023

CERTIFICATIONS

- CompTIA - Security +