PREM KUMAR SANTHANAM

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EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems   **New York, NY**
Master of Science (MS) in Cybersecurity | **Concentration**: Cybersecurity| **GPA:** 3.75/4   December 2025

SRM Institute of Science and Technology   **Chennai, India**
Bachelor of Technology in Computer Science and Engineering | **Concentration**: Cybersecurity| **GPA:** 8.8/10   May 2024

RELEVANT COURSEWORK

Risk Management | Compliance and Frameworks | Cryptography | Cloud Security |Information Security |Network Security |
Malware Analysis | Penetration Testing and Vulnerability Assessment | Information Assurance | Access Control Systems

TECHNICAL SKILLS

Programming Languages: Python, R, SQL, PowerShell, Git
Operating Systems: Linux (Kali, Ubuntu, Debian), Windows from XP up until 11, iOS (all versions), Mac OS X
Database: MySQL, Oracle
Cloud Infrastructure : Amazon Web Services (AWS), Microsoft Azure, Palo Alto Cloud Manager
Tools: Wireshark, Nessus, Burpsuite, Metasploit, Aircrack-Ng, Splunk, Nmap, Snort
Network Security: VPN, Firewall, IDS, Log and event analysis, Network Security and Operations, DNS
Security Management: GRC, Privacy and Security (CIA), Network protocols (HTTP,TCP/IP,UDP), Access Management
Data Analysis Tools: Power BI, Tableau, Power Automata, Kibana
Frameworks: NIST CSF 2.0, ISO 27001, ISO 27002, CIS, MITRE ATT&CK
Certifications: Defending Active Directory, Microsoft SDL for Secure Software Development, Security+ (Pursuing)

PROJECTS

Zero-Trust Architecture implementation for Prem's T-shirt company   September 2024 – December 2024
- Designed and implemented a Zero Trust Architecture Framework for an e-commerce and IT business which runs on cloud environment.
- Enforced with Identity based controls, micro-segmentation and multi factor authentication(MFA) to ensure authorized user access and protecting the network through segmentation.
- Allocated Azure AD for centralized Identity and Access Management (IAM) and deployed network segmentation policies with Palo Alto Firewall.
- Integrated with real-time continuous monitoring through Splunk SIEM enhancing lateral movement protection and reducing attack surface. Ensuring compliance like NIST CSF and CIS benchmarks to achieve data security and privacy.

Security Monitoring Dashboard for Cloud Computing   September 2024 – October 2024
- Onboarded Amazon Web Services to build a comprehensive cloud security monitoring dashboard that aggregates, visualize, and analyses security data to identify and respond to threat in real-time.
- Driven by collecting security logs and event data and integrate with monitoring tool called AWS Guard Duty for continuous monitoring and AWS SNS for setting up alerts in case of suspicious activity.
- Assigned AWS lambda to automate revocation of access and Kibana to build an intuitive and interactive dashboard.
- Adopted AWS Compliance to ensure data security and privacy which enhanced trust and reputation among stakeholders.

Key and Certificate Management System   July 2024 – August 2024
- Implemented AWS KMS and AWS Certificate Manager (ACM) to securely store, manage and rotate cryptographic keys and certificates across services.
- Automated lifecycle management by leveraging AWS Lambda, CloudWatch and CloudTrail for key rotation, certificate renewal and activity auditing.
- Planted access control with AWS IAM policies ensuing role based access control to KMS and ACM resources.
- Enhanced compliance with AWS Config and AWS CloudWatch, AWS Cloud watch for logging and monitoring purposes that automates compliance report.

MICRO INTERNSHIP

Forage	**Virtual Stimulation**
AIG Shield Up : Cybersecurity	January 2025

- Completed a cybersecurity threat analysis simulation for the Cyber Defense Unit, staying updated on CISA publications.
- Drafted a clear and concise email to guide teams on vulnerability remediation.
- Utilized Python skills to write a script for ethical hacking, avoiding ransom payments by bruteforcing decryption keys.

Forage	**Virtual Stimulation**
AWS Solution Architecture Virtual Stimulation	July 2023

- Designed a scalable, secure and cost-effective hosting architecture for client who is experiencing significant growth as a solution architect at AWS.
- Exposed to core services including EC2,S3,RDS and IAM focusing on best practices, high availability and fault tolerance.

LEADERSHIP

Bureau of Indian Standards – SRM University, Vice-President   April 2022 – May 2024

- Operated 02 events with club members and provided mentor for quality check intern for electronic products.
- Catalogued 03 workshops (01 for Cleaning Unwanted waste products in Shores, 02 for quality check on government buildings) and achieved 75% higher completion rate than usual.
- Executed 01 on-campus event on University cultural with Quiz games and availed opportunity to involve as NGO Member. Accommodated 60% of off-campus students and inbound 40% in team.

Campus Life – SRM University, Technical Team Head   August 2022 – May 2023

- Co-ordinated 05 group of juniors and offered technical skills and training on security tools and cloud services with 92% success rate.
- Conducted 02 workshops and 06 technical event for juniors and collaborated mid-seniors on the area of cybersecurity which got recognition by 25% of state universities and 60% of city universities.

ACTIVITIES

Ignite'25, Mentor	January 2025
Cybersecurity on Business, Mentor	December 2024
Deep Dive in Security Framework and Compliance, Mentor	November 2024
Empowering Tomorrow's Engineer, Mentor	August 2024
Industry Focus and Career Building in Cybersecurity, Mentor	August 2024
Ignite'24, Mentor	April 2024