

Deepak Kumar

COMPUTER SCIENCE GRADUATE

ABOUT ME

Computer Science graduate with a keen interest in software engineering, database management, and cloud computing. Proficient in AWS for deploying applications and implementing security measures. Seeking career opportunities to leverage my skills in a dynamic work environment.



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EDUCATION

Bachelor's Degree in Computer Science

- George Mason University
Fairfax, Virginia

Certifications

- AWS Certified Cloud Practitioner
- AWS Certified Solutions Architect
- CompTIA Security +
- CompTIA Network+
 - Expected May 2024

Skills

- Software Development and Deployment (Python, Java, C)
- Software Testing
- Virtual Machine Configuration
- Database Administration and Management
- AWS Cloud Services (EC2, S3, CloudFormation, RDS)
- Packet Tracing and Analysis
- Risk Assessment
- OS Security Configuration
- Firewall/IDS/IPS Configuration

Tools

- AWS CLI and AWS Console
- Jetbrains IDE's
- Microsoft 365 Suite (Word, SharePoint, Powerpoint)
- VMWARE Fusion & VirtualBox & MacOS Bootcamp
- Oracle SQL Developer & MySQL
- Wireshark, CISCO PT
- Nmap, Burp Suite, YARA, Splunk
- RHE Linux, Kali, Ubuntu Sever and Desktop, MacOS, and Windows 11

ACADEMIC/PERSONAL PORTFOLIO

PROJECTS

Banking App

- Designed the development of a desktop application enabling simulation of bank transactions such as deposits, withdrawals, and transfers among users. Implemented a secure user registration system with username, email, passwords and utilizing BCrypt to hash sensitive data.
- Leveraged an agile workflow methodology in conjunction with Git versioning system to update and enhance applications.
- Led the construction of a banking application hosted on AWS, encompassing the configuration of an AWS NoSQL database.
- Implemented fuzz testing to subject code to various inputs to identify vulnerabilities.

Message Encryptor

- Desktop solution enabling users to securely send and receive messages through the generation of keys.
- Storage of metadata to facilitate efficient search/retrieval of information.
- Emphasized on the perseverance of data integrity and confidentiality through implementation of encryption and secure channels.
- Constructed a back end solution using MongoDB to store messages alongside with keys for message retrieval.

DNS Resolver

- Created a solution that has a similar functionality to nslookup in order to retrieve DNS type A records.
- Generated packets in accordance to RFC 1035 to send to Google's DNS server.
- Structured a concise output of all records for a given subdomain.

AWS Web Hosting Security Project [Current]

- Utilized AWS Route53 in order to register a domain name while creating an alias to point to an S3 bucket that stores static website content.
- Employed bucket versioning to seamlessly update content.

OTHER	ACADEMIC/PERSONAL PORTFOLIO CONT.
<p>Soft Skills</p> <ul style="list-style-type: none"> • Written/Verbal Communication • Teamwork and Collaboration • Problem Solving • Leadership • Time Management • Multilingual <ul style="list-style-type: none"> ◦ English: Proficient ◦ Hindi : Native ◦ Punjabi: Native ◦ Spanish: Novice <p>Topics of Interest</p> <ul style="list-style-type: none"> • Agile Methodologies • Software Lifecycle (SDLC) • OSI Model and Networking • MITRE ATT&CK and NIST • Cybersecurity Awareness • Cloud Architecture and Development 	<p>Network Security Analysis</p> <ul style="list-style-type: none"> • Configured Ubuntu Server and Kali Linux to simulate network environments for communication analysis. • Utilized WireShark to monitor traffic between the servers, identifying potential security vulnerabilities and malicious activity. • Utilized passive reconnaissance tools to gather information about the other Virtual Machine, allowing for the exploration of potential attack vectors and security weaknesses. • Used VirusTotal to conduct comprehensive file analysis, identifying security vulnerabilities and potential threats within files exchanged between the servers. <p>S3 Bucket Transfer Project [Current]</p> <ul style="list-style-type: none"> • Utilized python libraries in order to create, configure, and upload to S3 buckets. • Implemented encryption mechanisms such as SSE-S3 and KMS for data security. <p>WORK EXPERIENCE</p> <div> <div>World Market</div> <div>Falls Church May 2021 - Present</div> <div>Team Lead/Badge Holder</div> <ul style="list-style-type: none"> • Undertook a leadership roll in charge of a team of five-ten employees. • Managed truck logs for incoming inventory shipments. • Achieved store revenue goals for the end of fiscal year for three consecutive years. • Assisted in receiving and monitoring inventory count. </div> <div> <div>Office Depot</div> <div>Falls Church Feb 2018 - May 2021</div> <div>Print/Tech Advisor</div> <ul style="list-style-type: none"> • Exhibited proficiency in technical tasks such as computer setup, malware scanning, diagnostics tests, hard drive replacement, data recovery and transfer, and computer backups. Additionally, skilled in software installation and configuration to optimize end-user experience. • Worked on 1000+ projects single-handedly that varied from copies, banners, canvases, posters, booklets, business cards, stamps, and other marketing materials. • Demonstrated strong project management skills by guiding customers in selecting designs to accentuate their business. • Skilled in multitasking to to efficiently complete all client's jobs in a timely manner and ensure perfect delivery. </div>