WORK EXPERIENCE

Cloud Security Club

June 2024 - Current

Security Researcher (AWS)

- AWS Security Analysis: Perform detailed root cause analysis to understand the underlying reasons behind vulnerabilities, ensuring effective remediation strategies are implemented.
- Tool Proficiency: Expertise in AWS CLI and security tools like Pacu and Prowler to automate security assessments, identify vulnerabilities, and assess overall AWS security posture, optimizing processes for security and efficiency.
- Research & Remediation: Investigate AWS security threats, develop and implement effective remediation strategies. Ensure AWS environments remain secure through proactive monitoring and mitigation.
- Automation & Documentation: Contribute to the development of security documentation and best practices, facilitating knowledge sharing and continuous improvement in AWS security measures.

CERTIFICATIONS

AWS Certified Solutions Architect Associate
AWS Certified Cloud Practitioner

Achieved June 2024 Achieved Dec 2023

TECHNICAL PROJECTS

Paws-enum - AWS Enumeration script (Bash, AWS CLI)

• A bash script utilizing AWS CLI commands to enumerate IAM, S3, and EC2 resources, identifying security misconfigurations. Results are formatted and stored in a report file using 'jq'.

Svalbard - Password manager & strength checker (Python, SQL, docker)

• Python-based password manager and strength checker adhering to the latest OWASP policy, deployed via Docker. Encrypted with SHA256, passwords are accessible only with a master password.

AWS Email Setup (SQS, SES, Lambda, IAM)

• Automated email processing using AWS SQS and Lambda for scalability and efficiency. Configured AWS, SES and IAM ensure secure, high-deliverability email management.

AWS Three-tier Web Application (EC2, ELB, IGW, Aurora, IAM, VPC, SG)

• A secure, 3-tier architecture with public/private subnets, ELBs for multi-AZ traffic distribution and auto-scaling, and Aurora read replicas for high availability. Key AWS services like EC2, VPC, and ELBs are employed.

EDUCATION

Chitkara University

Graduating: July 2026

Bachelor of Engineering, Computer Science Engineering (CGPA: 9.36)

Organizations/Awards: Dean's Toppers List, AWS C3 Captain, Cybersecurity Head of OSC.

SKILLS

AWS – IAM, EC2, Amplify, CLI, S3, SQS, SES, SNS, Route 53, VPC, RDS, CloudWatch, DynamoDB, Lambda etc.

DevOps – Docker, Docker-compose, Gitlab, Kubernetes, Terraform, Iac, CI/CD automation - Jenkins.

Programming Languages – Python, C. C++

Scripting Languages – Bash, Python

Security – OWASP 10, Pacu, Graphrunner, BurpSuite, Metasploit, Nmap, Cloud pentesting, Web Pentesting.

ACHIEVEMENTS

- Selected as one of 87 AWS Cloud Club Captains from a competitive pool of 1,200 applicants.
- Managed a team of 6 members as Head of Cybersecurity at Open Source Chandigarh.
- Received university appreciation for identifying critical vulnerabilities, including a stored XSS resulting in 100% account takeover on their website, resulting in enhanced security measures.
- Create educational YouTube content on cybersecurity and cloud security, with over 300 subscribers. Featured content includes CTF solutions, cloud pentesting, and expert guidance.