

Education

Saint Louis University – Master of Information Systems

Aug 2023 – Present

GPA: 3.95

Presidency University – Bachelor of Information Science

Aug 2019 – Apr 2023

GPA: 3.4

Work Experience

Cloud Security Intern – *Alphathena*, Chicago, IL

Jan 2025 – Ongoing

- Conduct in-depth security assessments of AWS infrastructure, SaaS integrations, and back-end services; developed automated compliance checks using AWS Config and Lambda.
- Designed and implemented threat detection pipelines with Amazon GuardDuty and CloudWatch Logs Insights, reducing incident detection time by 50%.
- Built a scalable ETL framework using Python and Apache Airflow to automate daily data imports, reducing human intervention by 90%.
- Designed and implemented a log archival pipeline to move PROD API and Flask logs to S3 with automated Glacier transition after 15 days, optimizing storage costs and ensuring audit readiness.

Cloud Security Intern – *Alphathena*, Chicago, IL

May 2024 – Aug 2024

- Led incident triage exercises, collaborating with cross-functional teams to investigate alerts, triage potential breaches, and execute response playbooks.
- Coordinated penetration testing engagements and remediated critical vulnerabilities in VPC security groups and IAM policies.
- Orchestrated automated monthly rotation of EC2 key pairs and AWS Secrets Manager credential vaulting to eliminate exposed credentials and achieve 100% rotation compliance.
- Developed custom encryption modules with AWS KMS for S3 object at-rest protection, ensuring end-to-end data confidentiality.

Software Engineer Intern – *Wrecked Esports*, Bangalore, India

Apr 2023 – Jul 2023

- Designed and deployed an internal reporting dashboard using advanced MySQL queries to enhance decision-making
- Enhanced invoice accuracy and query responsiveness by 44% while cutting maintenance needs by 50% using AI.

Software Engineer Intern – *Wrecked Tech Private Limited*, Bangalore, India

Jan 2023 – Mar 2023

- Automated testing processes with Bash scripts, improving system reliability and operational efficiency.
- Developed a feed refresh algorithm that boosted processing speed by 150% and increased content uniqueness by 80%.
- Performed advanced data analysis with Pandas and NumPy, enabling data-driven decision-making and identifying key metrics.

Projects

Automated Threat Hunting Framework, Self-Developed — *AWS CloudTrail, GuardDuty, Slack, PagerDuty*

Developed a Python-driven toolkit integrating AWS CloudTrail and GuardDuty logs to surface anomalous API calls; enabled real-time alerting via Slack and PagerDuty.

Secure Authentication Platform, Self-Developed — *AWS Cognito, OAuth2, MFA, Python, Jinja2, WeasyPrint*

Designed multi-factor authentication and OAuth 2.0 flows for a custom SaaS application on AWS Cognito, integrating comprehensive logging and monitoring for audit trails.

Core Skills

Cloud Security:	AWS IAM, KMS, GuardDuty, Inspector, Config, CloudTrail, Security Hub
Infrastructure as Code:	Terraform, CloudFormation
Threat Detection & Monitoring:	ELK Stack, Datadog, Grafana, CloudWatch, Lambda
Networking Security:	VPC, Security Groups, NACLs, TLS/SSL
Programming & Scripting:	Python, Bash, SQL
Incident Response:	Playbook development, Forensic log analysis, Triage workflows

Certifications

AWS Certified Security Specialist – Amazon Web Services

In Progress

AWS Certified Developer - Associate – Amazon Web Services

Jul 2024

AWS Certified Solution Architect - Associate – Amazon Web Services

Jul 2024

Publications

- **Intent-Driven Code Synthesis: Redefining Software Development with Transformers.** Preprint, 2025.
doi:10.20944/preprints202504.1732.v1

Professional Affiliations

Volunteer, Cloud Security Alliance