Edgbaston, Birmingham

Divya Goswami

Versatile Operational and Security engineer with experience in system administration, site reliability, automation and programming.

Deployed monitoring tools and automated manual workflows. Capable of working under any environment.

Skills

Scripting and Automation:

- Scripts using Bash and Python over AWS and GCP and service scripts on k8s clusters.
- Deploying clusters with Ansible script and monitoring health over ArgoCD
- Pipeline setup over Jenkins

Version control system: Demonstrate expertise in the knowledge of GitOps.

System Administration:

- Efficient both on Linux (5yrs) and Windows servers.
- AWS and GCP services handling
- Kubernetes Monitoring and Security.
 Secret Management, cluster hardening based on CISA rules.
- Hardening Docker images and setting up healthchecks for failed pipelines.
- Custom building Linux kernel, creating drivers in C
- Configuring Network Firewalls, Security Scanners, conducting VAPT reports on product

My Personal Experiments and Projects

Portfolio link: https://rachejazz.me
Github Profile: https://github.com/rachejazz
Projects:

- Deployment using Voice assistant driven pipeline <u>Details</u>
- Laufeyson, Domain Recon Framework capable of gathering intel on a domain or an IP. <u>Details</u>
- DevSecOps-Automation-Monitoring: scripts that can be used by Devops practitioners for automating daily workflows. <u>Details</u>
- Keka Reminder Bot capable of sending scheduled messages which works for months with minimal memory consumption. <u>Details</u>
- Bypassing CSP, File Forensics: how polyglot files can be taken advantage of in bypassing CSP rules for Reflected XSS attacks. <u>Details</u>
- Hardware implementation A Computer from scratch: <u>Details</u>
- GNU toolchain on InterProcess Communication(IPC) Details
- New Tab Extension: Built a simple new tab extension that supports chrome and firefox browsers. Available on Firefox Add-ons. <u>Details</u>

Tech Blogs:

https://rachejazz.me/blogs.html

Certifications and Volunteering

- Scholarship to Attend BlackHat Europe 2023
- Student Ambassador for Msc CyberSecurity
- AWS Community Builder
- IBM Z Ambassador 2021
- GHC Scholar and OpenSource Mentor 2021
- Beginner in Linux Kernel Development
- Linux Server Management and Security

Experience

• Site Reliability Engineer

June 2022 - August 2023

Workspan, Angad Corporate, Pvt, Ltd.

- Automation in GCP to Jira Integration, open firewall detection and removal, expired IAM access purging
- o CICD security scanning, SCA, SAST, DAST report creation.
- Google Security Command Centre exploration and instructing strict adherence to security practices.
- Secret Management, SSL certificate update, WAF configuration on GCP
- DevOps Intern

March 2022 - June 2022

INDmoney, Finzoom Investment Advisors (P) Limited.

- Setting up metrics and alerts for RDS/ECS Services/Redis clusters using cli and setting up dashboard on grafana by linking cloudwatch logs using arn policy.
- Recording data of uncharted resources over excel sheet using 100% automated workflow.
- Tag based cost allocation and migrating cost exploration from AWS to Grafana. Setting up Jenkins job for auto allocation of tags of every new resource
- Assigned with core deployment window. Issuing hotfixes and monitoring proper gitops deployment everyday.
- Dev(Sec)Ops Intern

September 2021 - March 2022

Trell Experiences Pvt Ltd.

- o Implemented GitOps Security access control, CI/CD pipeline upgrade
- Docker and Kubernetes Security Deployed Vault and Falco via helm for secret rotation and management and monitoring events on k8s cluster. Created hardened Docker images for restricting privileges to running services.
- System-Admin, Security and IAM Created scripts to scan unprivileged users using sudo on server, on demand log monitoring based on time period over kibana, automate exit policy for employees exiting the org.
- Open Mainframe Project Mentee'21

June 2021 - Aug 2021

The Linux Foundation, IBM Z

- Revamped a Flask application for IBM Z
- Refactored 70% of code and improved UI and Backend.
- Scripted automations for pulling and formatting data for various Linux Distributions.
- Reduced 80% manual configging and reloading of server that helped moving forward with CI/CD Pipeline
- Jr. DevOps Engineer

2020 Dec - 2021 Feb

Dynopii Pvt. Ltd.

- Administered 4 Linux servers
- Surveillanced application deployments on Digital Ocean.
- Wrote Dockerfiles and docker compose and tested deployment locally on VMWare.
 - Setup fail2ban firewall for preventing online VoIP server attacks.

Education

 University of Birmingham
 MSc in Cybersecurity
 2023 - PRESENT, BIRMINGHAM Heritage Institute Of Technology
 Btech in Computer Science
 2018 - 2022, INDIA, CGPA 8.2/10