SAGAR MALHOTRA

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Technology-driven software professional with 3 years of experience in DevOps and Cloud. Automated Cloud infrastructure with Terraform, reducing deployment times by 25%, and enhanced security through Scripting, Kubernetes, and Vault secrets management. Managed & maintained Linux & Window servers. Implemented CI/CD pipelines and Monitoring, improving efficiency by 40% & reducing vulnerability incidents by 50%. Highly motivated to leverage skills in Cloud, DevOps & Security in the designated role

WORK EXPERIENCE

CROWDDOING — Boston, MA
Cloud Engineer — February 2024 – Present

- Set up a new MongoDB database and migrated existing data, ensuring 100% data integrity and a 30% improvement in performance
- Implemented security controls and best practices for database and data management, resulting in 75% reduction in security incidents
- Created database views and set up role-based access controls in MongoDB for various teams, ensuring secure and efficient data access, maintaining data confidentiality, and reducing unauthorized access by 40%

WAYFAIR — Boston, MA
Cybersecurity Coop - Cloud — January 2023 – June 2023

- Automated GCP infrastructure configuration and provisioning using Terraform and Git for creating a real-time asset inventory replica in Big Query, ensuring continuous real-time export of data to BigQuery and reducing the deployment time by 25%
- Formulated and optimized complex SQL queries in Google BigQuery, analyzing data with Looker Studio; identified 12 critical security vulnerabilities in organization-level cloud infrastructure and user permissions, enhancing overall security posture by 40%
- Deployed a scalable automated workflow using Buildkite pipeline and Helm charts to access and configure the Kubernetes secret, reducing high privilege access to sensitive Kubernetes secret and enhancing the organization's zero-trust policy
- Developed Python script to securely access the OAuth client secret from the Hashicorp Vault credential store, maintaining the confidentiality of the secret from users and securing the deployed application
- Recognized in the Wayfair Hall of Fame for outstanding problem-solving and teamwork skills, for helping to detect and fix Buildkite pipeline stage issues and supporting the team in the deployment tasks

ITC INFOTECH PVT LTD — Bengaluru, Karnataka, India
DevOps Engineer — July 2019 - November 2021

- Leveraged Agile methodologies to automate the built and deployment of 8 full stack applications using Jenkins and Azure DevOps, by building and maintaining CI/CD pipelines increasing application deployment process efficiency by 40%
- Administered Linux systems in public cloud environments, focusing on installation and maintenance. Implemented automation scripts with Bash and PowerShell to enhance the efficiency and reliability of infrastructure components
- Employed Terraform and ARM template to provision AWS and Azure infrastructure, achieving a 30% reduction in deployment time and a 20% increase in resource utilization efficiency through infrastructure as code (IaC) practices
- Developed Python scripts to automate Jira issue migration to ADO Dashboard, eliminating 100% of manual migration tasks
- Automated application containerizations for microservices using Docker and managed their deployment in the Kubernetes cluster
- Orchestrated the seamless integration of automated security scanning and testing within CI/CD pipelines, harnessing the power of SonarQube and Selenium, resulting in a 50% reduction of vulnerability incidents in production within the first year
- Implemented and optimized Prometheus monitoring solutions, reducing system downtime by 30% and improving availability
- Integrated automated compliance checks, leading to a sustained 95% compliance rate and reducing manual audit time by 70%
- Configured pre-deployment approvals and build/release notifications in Azure, gaining 100% control over the deployment workflow

EDUCATION

Northeastern University — Boston, MA, USA
Master's in Information Systems (GPA: 3.70) — January 2022 - December 2023

- **Teaching Assistant** for course Data Management and Database Design

University of Petroleum and Energy Studies — Dehradun, Uttarakhand, India
Bachelor of Technology, Computer Science Engineering — July 2015 - May 2019

TECHNICAL SKILLS

- **TOOLS/ PLATFORMS:** Azure DevOps, Azure Cloud, Git, GitHub, GitLab, AWS Cloud, Google Cloud Platform, Terraform, Docker, Kubernetes, Looker Studio, Jenkins, Jira, Confluence, BigQuery, Hashicorp Vault, CloudFormation, Selenium
- **SCRIPTING/ PROGRAMMING LANGUAGES:** Java, Python, PowerShell, Bash
- **OPERATING SYSTEMS/ DATABASE:** Windows, Linux, Oracle 11 g, MySQL, MongoDB

ACADEMIC PROJECTS

WEB APPLICATION & IaC || Flask, AWS (EC2, IAM, RDS, S3, Lambda, CloudFormation), GitHub — September 2022

- Build Python Flask Rest API and deployed it automatically on AWS EC2 instance using GitHub action workflows
- Provisioned infrastructure stack which included RDS instance, S3 bucket, IAM policies, and other infrastructure elements on AWS using custom CloudFormation template, built lambda function to send verification emails and upload logs to CloudWatch

CHEMICAL IMAGE TRANSLATION || Machine Learning, Python, NumPy, TensorFlow, Keras — June 2022

- Processed a dataset consisting of 4 million chemical images and devised a deep-learning framework model to predict the chirality of each chemical compound. Preprocessed training images by resizing them & standardizing them to the same color gradient
- Developed a Neural Network model using EfficientNet, achieving a validation accuracy of 92% with a log loss of 0.43

NORTHEASTERN BUDDY || ORACLE AND PL/SQL (SQL, Procedures, Functions) — March 2022

- Accessed user's location and recommended routes and transportation available for the destination along with matched users for buddy walking by matching the user's destination and timings using SQL queries and procedures