**Name: Sreshta K**

**Role: Lead DevOps Engineer**

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**PROFESSIONAL SUMMARY**

* Over 10 years of experience in the IT landscape, specializing in Senior **AWS/DevOps Engineering**
* Designed and implemented **AWS** infrastructure for multiple clients, showcasing proficiency in **CloudFormation** templates.
* Spearheaded the administration and monitoring of tools like **Splunk**, **Nagios**, and **Kafka**, showcasing prowess in building, deploying **Java**, and **SOA applications**. Proficient in troubleshooting build and deployment issues.
* Implemented advanced observability solutions using **AWS X-Ray** and **AWS CloudWatch Insights**, enabling efficient troubleshooting and performance analysis.
* Orchestrated the migration of monolithic applications to microservices architecture using **AWS ECS** and **EKS**, achieving improved flexibility and scalability.
* Developed and maintained automation scripts with **Python** and **Ansible**, ensuring continuous delivery and deployment excellence.
* Established life cycle policies for **AWS Glacier** data backup, demonstrating hands-on expertise with diverse **AWS services** such as **EC2** and **S3**, leveraging **CLI tools**.
* Configured and maintained critical **AWS resources**, including **EC2 instances**, **ELB**, and **RDS databases**, prioritizing high availability and scalability.
* Leveraged **Nexus** and **Artifactory** repository managers for efficient **Maven builds**, ensuring seamless software development.
* Championed **End-to-End automation** using **Jenkins** for continuous integration and delivery across diverse builds and developments.
* Led initiatives to implement **serverless computing models** using **AWS Lambda**, optimizing resource utilization and reducing operational overhead.
* Conducted regular performance tuning and optimization activities for **AWS resources**, utilizing **AWS Trusted Advisor** and **AWS Config** to identify and rectify potential issues.
* Architected and implemented **disaster recovery strategies** using **AWS services** like **AWS Backup** and **AWS CloudEndure**, ensuring business continuity in the event of system failures.
* Led the adoption of **AWS EventBridge** for event-driven architectures, streamlining communication and workflows between microservices.
* Implemented advanced containerization strategies using **AWS Fargate** and **EKS**, optimizing resource utilization and simplifying container orchestration.
* Collaborated with development teams to implement advanced caching strategies using **AWS ElastiCache**, improving application performance, and reducing latency.
* Conducted regular training sessions on **AWS best practices** and emerging technologies, ensuring the team's continuous growth and staying abreast of industry trends.
* Gained exposure to administrative servers, including **Apache**, **Tomcat**, **WebLogic**, **JBoss**, and **WebSphere**.
* Demonstrated mastery in **TCP/IP**, **AD**, **DNS**, **DHCP**, **WAN**, **LAN**, and **SMTP**, ensuring robust networking configurations.
* Proficiently worked with **version control systems**, including **GIT**, enhancing collaborative development practices.
* Applied **Kubernetes proficiency** to orchestrate the deployment, scaling, and management of **Docker containers**.
* Conducted regular security audits and vulnerability assessments using tools like **AWS Inspector**, ensuring compliance with industry standards, and mitigating potential risks.

**TECHNICAL SKILLS:**

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| --- | --- |
| **Cloud Environments** | AWS (Amazon Web Services), GCP |
| **Operating Systems** | Linux/UNIX, CentOS |
| **Web/ Application Servers** | Apache, Apache Tomcat, Node.js |
| **Databases** | MySQL, AWS Aurora |
| **Version Control Tools** | Git, Bitbucket, GitHub |
| **Configuration Management** | Ansible, Puppet, Chef |
| **CICD Tools** | Jenkins, AWS CodePipeline, GitLab CI/CD |
| **Container Tools** | Docker, Kubernetes |
| **Monitoring Tools** | Grafana, Prometheus, Nagios, Icinga, NewRelic, Splunk |
| **Scripting Languages** | Groovy, Python, Shell scripting |
| **Bug Tracking & Testing tools** | JIRA, J Unit, J Meter Test Flight, Test Rail, Selenium. |
| **Networking** | AWS Direct Connect, VPC peering, SDN (Open vSwitch) |

**PROFESSIONAL EXPERIENCE**

**Role: Lead DevOps Engineer**

**Client: AT&T - Remote May 2021 - Till Date**

**Responsibilities:**

* Led the development and oversight of the multi-cloud DevOps pipeline, managing continuous integration and delivery across AWS and GCP environments, focusing on automated processes using Terraform and Ansible.
* Architected CI/CD pipelines using Jenkins for AWS services like EC2, S3, and RDS, enabling quick and reliable application deployments while reducing manual intervention.
* On Google Cloud Platform (GCP), implemented CI/CD pipelines using Cloud Build and ArgoCD to streamline code integration and automate the deployment of applications on Compute Engine and Kubernetes Engine.
* Implemented Infrastructure as Code (IaC) practices using Terraform to automate the provisioning of AWS resources, including EC2 instances, RDS databases, and S3 buckets, ensuring repeatable and secure deployments.
* On GCP, automated the provisioning of resources using Terraform scripts for Compute Engine, Cloud Storage, and Kubernetes Engine (GKE), promoting consistency in the cloud environment.
* Configured monitoring and alerting on AWS using CloudWatch and Prometheus, providing real-time insights into resource usage and application performance, enabling proactive management.
* In GCP, set up Prometheus and Grafana to monitor application performance on Compute Engine and GKE, optimizing resource utilization and ensuring high availability of services.
* Enhanced cloud infrastructure security on AWS by implementing IAM policies, configuring AWS KMS for data encryption, and performing automated security assessments using Ansible.
* On GCP, enforced security best practices by defining IAM roles and policies, implementing Google Cloud KMS for encryption, and using Terraform for automated security configurations.
* Automated multi-cloud resource management, utilizing Ansible for configuration management on both AWS EC2 instances and GCP Compute Engine, streamlining infrastructure updates and reducing operational overhead.
* Mentored junior DevOps engineers in deploying and managing cloud services on AWS and GCP, emphasizing the use of CI/CD tools like Jenkins and ArgoCD, and promoting best practices for Infrastructure as Code (IaC).
* On AWS, integrated Jenkins with CodePipeline to create a CI/CD pipeline that automates the deployment process for applications, ensuring continuous integration and reducing release cycle times.
* Implemented CI/CD pipelines on GCP using Google Cloud Build and ArgoCD, automating code testing and deployment to Compute Engine and Kubernetes Engine (GKE), ensuring efficient delivery.
* Managed AWS networking, configuring VPCs, subnets, security groups, and load balancers to optimize and secure inter-service communication between EC2 instances and other cloud resources.
* On GCP, configured VPC networks, subnets, and firewall rules to secure communication between services, optimizing data flow within Compute Engine and Kubernetes Engine (GKE) deployments.
* Enhanced monitoring on AWS by integrating Prometheus and Grafana with CloudWatch to provide comprehensive insights into system health, enabling efficient resource management and quick issue resolution.
* On GCP, set up Prometheus and Grafana dashboards to monitor the health of Compute Engine instances and GKE clusters, facilitating proactive cloud resource management.
* Defined Infrastructure as Code (IaC) practices using Terraform on AWS to automate the creation of EC2, S3, RDS, and VPCs, ensuring that infrastructure is deployed securely and consistently.
* On GCP, utilized Terraform to create reusable modules for provisioning Compute Engine instances, Cloud Storage buckets, and GKE clusters, promoting consistency in infrastructure deployment.
* Implemented security best practices on AWS, configuring IAM policies and roles, encrypting data with AWS KMS, and setting up automated vulnerability scanning using Ansible scripts.
* On GCP, enforced cloud security by defining IAM roles, configuring Google Cloud KMS for encryption, and integrating Terraform for the automation of secure infrastructure deployments.
* Designed CI/CD pipelines using Jenkins to manage application deployments on both AWS and GCP, ensuring the automated build, test, and delivery process across multiple cloud environments.
* Optimized cloud infrastructure on AWS by configuring Auto Scaling groups for EC2 instances and load balancers, improving resource utilization and ensuring high availability of services.
* On GCP, configured autoscaling for Compute Engine instances and Kubernetes Engine to dynamically adjust resources based on real-time metrics, enhancing application performance.
* Led multi-cloud DevOps initiatives, overseeing the implementation of CI/CD pipelines, monitoring strategies, and security best practices for cloud services deployed on both AWS and Google Cloud.

***Environment:* AWS: EC2, RDS, S3, VPC, IAM, KMS, CloudWatch, CodePipeline, Auto Scaling, Lambda, EKS, Elastic Load Balancing (ELB), AWS WAF, Route 53, CloudFront, SSM (Systems Manager), SQS, SNS, GCP: Compute Engine, Cloud Storage, Kubernetes Engine (GKE), Cloud Build, VPC, IAM, KMS, Cloud Functions, Cloud Run, Cloud SQL, Cloud Monitoring, Cloud Pub/Sub, Cloud Armor, Cloud DNS, Tools: Terraform, Ansible, Jenkins, ArgoCD, Prometheus, Grafana, Docker, Kubernetes, Helm, Git, GitLab, TravisCI, SonarQube, Nexus Repository, ELK Stack (Elasticsearch, Logstash, Kibana), Splunk, Nagios, Python, Bash, PowerShell, Vault, OpenShift, Chef, Puppet, JIRA, Confluence**

**Role: Senior DevOps Engineer**

**Client: Shields Health Care Group - Buffalo, NY Oct 2019 - May 2021**

**Responsibilities:**

* Architected a multi-cloud security framework to enhance the security posture on both AWS and GCP, implementing best practices for IAM, encryption, and network security using Terraform.
* On AWS, implemented CI/CD pipelines using CodePipeline and Jenkins to automate the integration and deployment process, ensuring continuous delivery for applications hosted on EC2.
* On GCP, built CI/CD pipelines using Cloud Build and ArgoCD to automate code testing and deployment on Compute Engine and Kubernetes Engine (GKE), achieving a seamless release cycle.
* Optimized cloud resources on AWS by configuring CloudWatch monitoring for EC2 instances, setting up alerts for resource usage to enhance application performance and prevent over-utilization.
* On GCP, utilized Prometheus and Grafana to monitor Compute Engine instances and GKE clusters, optimizing the cloud environment for cost-effective resource allocation.
* Enforced multi-cloud security best practices, configuring AWS IAM policies for access control, and setting up Google Cloud IAM roles to ensure secure access to cloud services and data.
* Automated AWS infrastructure deployments using Terraform, provisioning EC2 instances, RDS databases, and S3 buckets for application hosting, ensuring efficient and consistent infrastructure management.
* On GCP, created Terraform scripts to automate the provisioning of Compute Engine instances, Cloud Storage, and Kubernetes Engine clusters, facilitating quick and repeatable deployments.
* Implemented service monitoring on AWS using CloudWatch, Prometheus, and Grafana, providing real-time insights into the health and performance of cloud applications hosted on EC2 and EKS.
* On GCP, set up Prometheus and Grafana dashboards for monitoring Compute Engine and GKE, enabling proactive management and optimization of cloud resources based on performance metrics.
* Mentored junior engineers in cloud management, guiding them in deploying applications on AWS using Jenkins and CodePipeline, and on GCP using ArgoCD and Cloud Build.
* Automated the configuration of AWS networking using Terraform, creating VPCs, subnets, and security groups to secure cloud communications and optimize network traffic between services.
* On GCP, configured VPC networks, firewall rules, and load balancers to secure and optimize inter-service communication within Compute Engine and Kubernetes Engine.
* Implemented Infrastructure as Code (IaC) best practices using Terraform to manage cloud resources on AWS, including EC2 instances, S3 buckets, and RDS, ensuring consistency in the cloud environment.
* On GCP, utilized Terraform to automate the provisioning of Compute Engine, GKE, and Cloud Storage, promoting infrastructure consistency and reducing manual provisioning errors.
* Optimized application performance on AWS, configuring Auto Scaling for EC2 instances to dynamically adjust resources based on traffic and workload, ensuring high availability.
* On GCP, enabled autoscaling for Compute Engine and Kubernetes Engine (GKE) instances, using Prometheus to monitor and adjust resource allocation in real time for optimized performance.
* Implemented secure CI/CD pipelines on AWS using CodePipeline integrated with Jenkins, enabling automated testing, deployment, and security checks for applications hosted on EC2.
* On GCP, built secure CI/CD pipelines using Cloud Build and ArgoCD, ensuring continuous integration and automated deployments to Compute Engine and GKE with built-in security compliance.
* Defined infrastructure as code (IaC) modules using Terraform to provision and manage AWS services, automating the setup of VPCs, EC2, RDS, and S3 to ensure secure and scalable infrastructure.
* On GCP, created Terraform modules for the automated provisioning of Compute Engine, Kubernetes Engine, and Cloud Storage, streamlining resource management and deployments.
* Automated AWS resource management using Ansible scripts to configure and manage EC2 instances and RDS, reducing manual interventions and promoting consistent configurations.
* On GCP, used Ansible to automate the configuration of Compute Engine and GKE, ensuring consistent deployments and reducing the potential for human error in cloud management.
* Enhanced multi-cloud security by integrating AWS KMS for data encryption and Google Cloud KMS for key management, ensuring data security across cloud environments.
* Led multi-cloud initiatives, overseeing the implementation of CI/CD pipelines, infrastructure automation, and security best practices on both AWS and GCP, ensuring robust cloud service delivery.

***Environment:* - AWS: EC2, RDS, S3, VPC, IAM, KMS, CloudWatch, CodePipeline, Auto Scaling, EKS, Elastic Load Balancing (ELB), AWS WAF, Route 53, CloudFront, SSM (Systems Manager), SQS, SNS, Lambda, CloudFormation, GuardDuty, Secrets Manager, GCP: Compute Engine, Cloud Storage, Kubernetes Engine (GKE), Cloud Build, VPC, IAM, KMS, Cloud Functions, Cloud Run, Cloud SQL, Cloud Monitoring, Cloud Pub/Sub, Cloud Armor, Cloud DNS, Tools: Terraform, Ansible, Jenkins, ArgoCD, Prometheus, Grafana, Docker, Kubernetes, Helm, Git, GitLab, TravisCI, SonarQube, Nexus Repository, ELK Stack (Elasticsearch, Logstash, Kibana), Splunk, Nagios, Python, Bash, PowerShell, Vault, OpenShift, Chef, Puppet, JIRA, Confluence**

**Role: Senior DevOps Engineer**

**Client: KPMG - Denver, CO Apr 2017 - Oct 2019**

**Responsibilities:**

* Collaborated with development teams to optimize application performance, utilizing **APM tools** like **Datadog** and **AppDynamics** to identify bottlenecks and enhance the overall user experience, while leveraging **AWS services** for scalability and reliability.
* Introduced **chaos engineering practices** with tools like **Chaos Monkey**, proactively identifying and addressing system weaknesses before impacting production environments, while utilizing **AWS infrastructure** for robust testing environments.
* Led initiatives for knowledge-sharing sessions and provided mentorship to junior team members, contributing to their professional growth and fostering a collaborative **DevOps c**ulture, supported by AWS services for collaborative development environments.
* Implemented **blue-green deployments** and **canary releases** with **Istio**, minimizing the impact of new releases on production environments and ensuring a seamless user experience, leveraging AWS services for **dynamic infrastructure management**.
* •Spearheaded the adoption of **GitLab CI/CD** for specific projects, streamlining development workflows and ensuring efficient collaboration between development and operations teams, complemented by AWS services for **integrated CI/CD pipelines**.
* Collaborated with the networking team to implement **SDN (Software-Defined Networking)** using tools like **Open vSwitch**, enhancing network agility and reducing manual configuration efforts, integrated with **AWS networking** services for seamless connectivity.
* Automated routine **database management tasks** with **Ansible** and participated in **database migrations**, ensuring data integrity and minimizing downtime during critical transitions, supported by AWS database services for optimized database operations.
* Integrated security scanning tools such as **Twistlock** and **Clair** into the **CI/CD pipeline**, enhancing the security posture of containerized applications, while leveraging AWS security services for comprehensive security measures.
* Architected and implemented a **multi-cloud strategy**, incorporating **Azure and GCP services** alongside existing **AWS infrastructure**, providing flexibility and redundancy across cloud environments.
* Led the integration of **HashiCorp Vault** for centralized secrets management, ensuring secure and auditable access to sensitive information across all environments, integrated with **AWS Key Management Service (KMS)** for enhanced security.
* Conducted advanced logging and monitoring solutions with the **ELK stack (Elasticsearch, Logstash, Kibana)**, significantly improving the detection and resolution of system issues, while leveraging **AWS CloudWatch** and **CloudTrail** for comprehensive monitoring and auditing capabilities.
* Developed comprehensive **technical documentation** to support deployment processes, CI/CD pipelines, and infrastructure management. This included creating detailed manuals, runbooks, and architectural diagrams that served as crucial references for the engineering team, ensuring consistent and efficient workflows across projects.
* Designed and optimized complex **SQL queries** for efficient database management and reporting. This involved creating and refining queries to handle large datasets, ensuring quick and accurate retrieval of data for various business intelligence and operational needs, significantly improving data accessibility and decision-making processes.
* Developed automation and infrastructure management scripts using **Golang**, enhancing operational efficiency and reducing manual intervention. This included writing robust and reusable code for automated deployment, monitoring, and maintenance tasks, contributing to the overall stability and scalability of the infrastructure.
* Worked closely with data engineers to integrate and optimize data pipelines and workflows. This collaboration involved designing and implementing data ingestion, processing, and storage solutions that ensured high availability, consistency, and performance of critical data systems, supporting the organization's data-driven initiatives.
* Developed and maintained **RESTful APIs** to support application functionality and integrations. This included designing API endpoints, ensuring secure and efficient data exchange between systems, and documenting API usage for internal and external stakeholders, facilitating seamless integration with various applications and services.
* Implemented and managed data workflows using Apache Airflow for efficient ETL processes. This involved setting up and configuring **Airflow DAGs** (Directed Acyclic Graphs) to automate data extraction, transformation, and loading tasks, ensuring timely and accurate data processing, and supporting the organization's data analytics and reporting needs.

***Environment:* AWS services, Datadog, AppDynamics, Chaos Monkey, GitLab CI/CD, SDN (Open vSwitch), Azure, GCP, HashiCorp Vault, Twistlock, Clair, ELK stack.**

**Role: DevOps Engineer**

**Client: Charter Communications - Denver, CO Nov 2015 - Mar 2017**

**Responsibilities:**

* Spearheaded on-premises to **AWS** cloud migration using **Terraform**, realizing a significant 30% reduction in operational costs.
* Automated a robust **CI/CD** pipeline with **Jenkins**, **Git**, and **Bitbucket**, ensuring swift and reliable software delivery.
* Implemented **Ansible** for advanced configuration management, boosting scalability by an impressive 25%.
* Led **Docker** and **Kubernetes** containerization efforts, optimizing resource utilization and slashing deployment times by 40%.
* Collaborated on monitoring solutions, integrating **Grafana** and **Prometheus** for real-time insights into system performance and facilitating proactive issue resolution.
* Enhanced security protocols through **LDAP** and **single sign-on (SSO)** solutions, fortifying access control and minimizing security vulnerabilities.
* Developed custom **Python scripts** for automation, streamlining complex tasks like log analysis and system monitoring, resulting in a 20% reduction in manual intervention.
* Conducted regular security audits and vulnerability assessments with tools like **Qualys** and **Nessus**, ensuring compliance with industry standards and safeguarding against potential threats.
* Architected and implemented a comprehensive disaster recovery plan, leveraging **AWS** services such as **Backup** and **CloudFormation**, ensuring seamless business continuity.
* Pioneered the adoption of **GitLab CI/CD** for specific projects, optimizing development workflows, and ensuring efficient collaboration between development and operations teams.

***Environment:* AWS, Terraform, Jenkins, Git, Bitbucket, Ansible, Docker, Kubernetes, Grafana, Prometheus, LDAP, SSO, Python scripting, Qualys, Nessus, AWS Backup, CloudFormation, GitLab CI/CD**.

**Role: Junior DevOps Engineer**

**Client: Info Builders Inc. June 2012 - July 2014**

**Responsibilities:**

* Assisted in managing and maintaining **Linux servers** to ensure stability and optimal performance in a production environment.
* Contributed to the implementation, configuration, and basic troubleshooting of the **LAMP tech stack (Linux, Apache, MySQL, PHP)** for the development and deployment of web applications.
* Participated in routine tasks and gained exposure to configuration management tools like **Puppet** and **Chef** for task automation and maintaining consistency across server environments.
* Performed basic database administration tasks with a focus on **MySQL** to support application development and deployment.
* Developed and implemented simple **Shell scripts** to automate repetitive tasks, enhancing efficiency and reducing manual intervention.
* Assisted in deploying and supporting applications on the **Apache Tomcat server**, gaining introductory experience in application server environments.
* Applied basic security measures to web applications, including **WordPress**, using **htaccess**, to contribute to the integrity and confidentiality of sensitive data.
* Engaged in knowledge-sharing sessions and assisted in onboarding activities for new team members to facilitate integration into the **DevOps** environment.
* Demonstrated foundational knowledge of **Shell scripting** and **Apache rewrite rules** to contribute to the enhancement of **web server configurations**.
* Assisted in monitoring server health and application performance using tools like **Nagios**, **Icinga**, **NewRelic**, and **Splunk** to identify and report issues.

***Environment:* Linux/UNIX, CentOS, AWS, Jenkins CI/CD, Git, Bitbucket, Puppet, Chef, MySQL, Apache, PHP, Node.js, Tomcat, Shell scripting, WordPress security (htaccess), Icinga, Nagios, NewRelic, Splunk.**

**EDUCATION**

**MASTER’S**

Computer Science Arizona State University Aug 2014 - Apr 2016

**BACHELOR’S**

Computer Science & engineering National Institute of Technology, Calicut Sep 2008 - May 2012