**Sankar Challa**

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**Summary:**
Highly experienced **Senior Cloud/DevOps Engineer** with over 7+ years of expertise in the banking domain. My proficiency extends to various **Cloud platforms**, disaster recovery, **efficient CI/CD pipelines**, Ansible automation, configuration management, containerization, and **robust security implementation**. I am dedicated to fostering a DevOps culture, streamlining **operational processes**, and delivering innovative solutions. My contributions have played a pivotal role in advancing the banking industry through diverse projects.

**Professional Summary:**

* Experienced in Release Engineering, DevOps, and **Cloud Infrastructure** across **Banking**, **Telecom,** Financial Markets, **E-Commerce**, and **Insurance**. Skilled in **Linux Administration** and **Automation**, with expertise in client collaborations and cloud environments.
* Proficient in **AWS** platform, including **EC2,** IAM**,** VPC, RDS, EBS, CloudWatch, CloudTrail, **CloudFormation**, AWS Configuration, Autoscaling, CloudFront, S3, SQS, SNS, EFS, Glacier, Lambda, and Route 53.
* Proficient in **ELK stack** and **AWS CloudWatch** for resource monitoring, custom dashboard creation, Logstash configuration, and automated alerts for issue resolution and performance optimization.
* Skilled in managing **AWS databases** such as RDS (Aurora), **Redshift**, **DynamoDB**, and **Elasticache**, effectively leveraging these services for big data and **Spark** applications.
* Proficient in AWS **infrastructure design** and security, adept in **Python programming**, and experienced in optimizing services like EC2, S3, RDS, VPC, ELB, IAM, KMS, EMR, Cognito, API Gateway, and more for robust, high-availability solutions.
* Proficient in **CloudFormation** templates to provision essential AWS infrastructure components such as **IAM roles**, S3 buckets, and backups, guaranteeing reliable, consistent, and **scalable deployments**.
* Skilled in **GCP** Firewallrule setup for improved user experience, reduced latency, and enhanced security compliance, while actively monitoring and contributing to documentation.
* Proficiently **led developer teams**, guided **data integration**, ensured **ETL** design excellence, and excelled in DevOps with **Azure DevOps**, **PowerShell**, Git, Jenkins, coupled with skilled Splunk administration.
* Proficient in working with **Azure Classic** and **Azure Resource Manager deployment models**, configuring virtual networks, **security groups**, and load balancers, ensuring high availability and **network security**.
* Significant proficiency in diverse **Azure services**, spanning Compute, Caching, **SQL Azure**, Network services, Active Directory and Websites, effectively utilizing these services for streamlined cloud deployments.
* Proficiently manage Azure Resource Management, **network configurations**, and ensure robust High Availability and **Disaster Recovery** strategies.
* Strong expertise in building**,** changing**,** andversioning **infrastructure** using **Terraform**, ensuring safe and efficient provisioning while managing complex dependencies and network issues.
* Extensive experience with **Terraform** for **Infrastructure as Code** (IaC) to efficiently create, modify, and manage cloud resources, ensuring reproducibility and scalability.
* Proficiently implemented cloud services such as **IAAS, PAAS, and SaaS**, incorporating technologies like **OpenStack**, **Docker**, and **OpenShift**.
* Proficient in **Kubernetes**, **pod creation**, **Docker setup**, image management, and **serverless Docker** orchestration via ECS, ELB, **CloudFront**, and CloudWatch.
* Managed **Kubernetes** **deployments**, focusing on high availability and **scalability** using horizontal pod autoscaling and resource management.
* Proficient **Linux/Unix system administrator** with an extensive understanding of **RedHat Enterprise Linux** (RHEL) 7 and 8, showcasing expertise in **managing and optimizing** server environments.
* Demonstrated proficiency in **system monitoring** and trend analysis, utilizing tools like **Splunk**, New Relic, AppDynamics, and **Nagios** to maintain optimal **server performance** and address issues proactively.
* Utilizing **JIRA** extensively, I focused on defect tracking, emphasizing workflow customization and aligning **business** requirements with appropriate IT solutions.
* Proficient in Linux administration, including **Red Hat**, **CentOS**, Oracle **Linux**, Debian, and **Ubuntu**, managing server configurations, **security**, and performance optimization.
* Proficiently crafted **Python** tools for Jenkins, enhancing Windows Kubernetes clusters through **Azure Container** Service. Adept in creating **flexible automation scripts** and tools.
* Utilized a solid understanding of standard networking protocols and components, such as **HTTP**, DNS, ECMP, **TCP/IP**, ICMP, the OSI Model, Subnetting, and Load Balancing strategies.

 **Technical Skills:**

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| Cloud Environments | Amazon Web Services (AWS), Azure, Pivotal Cloud Foundry (PCF) |
| Configuration Management Tools | Ansible, Chef, Puppet |
| Containerization Tools | Docker, Kubernetes, OpenShift, EKS |
| Virtualization | Hyper-V, VirtualBox, VMware, PowerVM |
| Operating Systems | Red Hat Linux, Unix, Ubuntu, Windows, macOS |
| Automation Tools | ANT, Maven, Jenkins, Terraform, Gradle |
| Database | MongoDB, MySQL, Amazon Aurora, IBM DB, DynamoDB |
| Scripting Languages | Python, JavaScript, Ruby, Bash Shell, PowerShell, JSON, YAML |
| Networking/Protocols | DNS, DHCP, SMTP, LAN, HTTP, SNMP |
| Version Control Tools | Git, Bitbucket, SVN, GitLab, GitHub |
| Monitoring Tools | SonarQube, Splunk, Nagios, CloudWatch, ELK, New Relic, JIRA |
| Application and Web Servers | Oracle WebLogic, IBM WebSphere, JBoss, Apache HTTP, Nginx, IIS, Apache Tomcat |
| Programming Languages | C, C++, C#, .NET, Java, JavaScript, Python, HTML, CSS, AJAX, jQuery |

**Professional Experience:**

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| **Client: ICICI Bank, New York**   **Duration: Oct 2022 - Present Role**: **Sr. Cloud/DevOps Engineer**  |

**Responsibilities:**

* Implemented **Infrastructure as Code (**IaC) principles through **Ansible**, minimizing manual errors and bolstering environment consistency.
* Significantly involved in the bank's **CI/CD automation**, improving **pipeline security** through advanced techniques like **vulnerability scanning** for reliable banking services.
* Proficient in network technologies, demonstrating proficiency in setting up **firewalls**, **managing** **routing**, overseeing **LAN** and **WAN** **configurations**, and effectively handling **DNS management** to strengthen and **secure** **network infrastructure**.
* Introduced **state-of-the-art DevOps** approaches utilizing tools such as Ansible, Git/Bitbucket, Jenkins, Docker, and more, to elevate the quality of **online banking services**.
* Crafted custom **Jenkins** pipelines to automate end-to-end **CI/CD** procedures, enabling automated builds, tests, and deployments.
* Managed project progress and team communication efficiently via **Jira**, ensuring smooth coordination among team members and stakeholders.
* Established effective version control using **Git/Bitbucket**, facilitating productive collaboration, code reviews, and version management.
* Automated testing processes in collaboration with **quality assurance teams**, leading to quicker feedback cycles and improved software quality.
* Skilled in efficiently managing a range of relational databases, encompassing **SQL, MySQL, Oracle**, and **PostgreSQL**, to ensure smooth **data management** and retrieval processes.
* Proficient in **administering application** and web servers, including **IBM Web Application Server**, IBM Internet Hosting Server, and **Apache Tomcat Server**, with a strong grasp of **SSL technologies** for web security.
* Thoroughly documented the automation process, encompassing design choices, configurations, and troubleshooting instructions, for future reference and knowledge dissemination.
* Contributed to the formulation of a **release management strategy**, ensuring smooth and controlled software rollouts to production environments.
* Played a vital part in reducing manual intervention, refining workflows, and elevating the overall efficiency of the **bank's software delivery lifecycle**.
* Efficiently configured **Kubernetes**, Docker, Docker Compose, Docker Swarm, and a Containerized BigID app including Tomcat, Nginx, Hadoop, and Node.js.
* Proficient in Docker, **Kubernetes**, and **Terraform** for container management. Skilled in deploying containers, managing images, and utilizing Kubernetes environments.

**Technical Tools:** Ansible, Kubernetes , Docker, Jenkins, Git/Bitbucket, QA tools, monitoring tools, Jira, Infrastructure as Code (IaC), CI/CD.

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| **Client: Manulife, Dallas, Texas**   **Duration: Feb 2022 - Sep 2022 Role**: **Sr** **DevOps Engineer**  |

**Responsibilities:**

* Designed and deployed applications on **AWS** using services like EC2, S3, Route53, RDS, DynamoDB, SNS, SQS, Lambda, RedShift, and CloudFormation.
* Executed a leadership role in **AWS** applicationtesting, covering tools, **CI/CD configuration**, comprehensive testing, and **monitoring** to ensure successful deployment.
* Automated AWS services using **Python scripts** for web servers, ELB, **CloudFront**, databases, and security groups.
* Implemented **AWS** **CloudFormation** templates for infrastructure as code (IaC) to automate the provisioning and management of AWS resources in a repeatable and scalable manner.
* Utilized **AWS** **CloudWatch** to monitor and analyze resource utilization, application performance, and operational health of AWS services, enabling proactive troubleshooting and optimization of the infrastructure.
* Utilized **Terraform** for AWS infrastructure automation and automated **CI/CD pipelines**, resulting in faster and more reliable releases.
* Managed secure **Docker/Kubernetes** for **scalable app** control, established **fault-tolerant** **AWS** **Kubernetes** for **microservices**.
* Designed **robust networks** using **Extreme Networks gear**, optimizing **performance** and **security**. Managed routing, switching, and **monitoring proactively** for seamless operations.
* Collaborated with vendors, maintained configurations, embraced ongoing learning, and **demonstrated** adept **troubleshooting**, ensuring **efficient issue** **resolution** and growth.
* Managed **cross-disciplinary groups**, shaping cloud approaches for **AWS and Azure**. Utilized Python scripting, **Git version** control to optimize processes.
* Implemented **HashiCorp** **Vault** for heightened **security**, **ensured robust** disaster recovery with AWS RDS snapshots, and automated **S3 image** resizing using **AWS Lambda**.
* Managed **on-premises** to **AWS migration**, optimizing services, **ensuring security**, and delivering cost savings and performance gains.
* Ensured secure database credential handling by leveraging **AWS Secrets Manager**, mitigating potential **security risks**.
* Skillfully utilize **Azure Monitor** for proactive oversight & **troubleshooting**. Deploy Azure services securely in VNets, managing **IAM** with RBAC & NSGs for **robust access control**.
* Integrated **OpenShift** with AWS services, enabling seamless deployment and management of applications in the private cloud environment, leveraging the benefits of both OpenShift's container platform and AWS's robust infrastructure and services.
* Demonstrated expertise in secrets and **key management**, automated log activation, and streamlined log aggregation for **DLP/SIEM**.
* Adept in **access management** automation, meticulous **logging**, and the implementation of robust **monitoring** procedures.
* Automated pipelines using **Jenkins** for AWS, **Kubernetes**, and **OpenShift**. Streamlined artifact management via **Nexus** for enhanced storage, **version control**, and access.
* Proficient in **Splunk**, Kibana, and **ELK Stack**, handled **data management**, **visualizations**, and upgrades, including **Splunk Enterprise**, ES, and ITSI, ensuring a resilient **platform** through collaboration with **infrastructure teams**.
* **Highly skilled** in intricate networking, including **TCP/IP**, UDP, DNS, load balancing, and firewalls, ensuring peak network performance.

**Technical Tools:** AWS services (EC2, S3, Route53, RDS, DynamoDB, SNS, SQS, Lambda, RedShift, CloudFormation), ELK stack (Elasticsearch, Logstash, Kibana), Terraform, Kubernetes, Docker, Helm, Red Hat OpenShift, Jenkins, Nexus, Maven, Nagios, Ansible, Ansible Tower, Google Cloud Platform services (Compute Engine, Cloud Functions, Cloud DNS, Cloud Storage)

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| **Client: DataFactz, Hyderabad, India**   **Duration: Sep 2019 - Oct 2021** **Role: DevOps Engineer**  |

**Responsibilities:**

* Set up **AWS infrastructure with Terraform** (VPC, EC2, S3, IAM, EBS, Security Group, Auto Scaling, RDS)
* Collaborated with AWS certified professionals to ensure a seamless VMware to **AWS** **migration**, covering assessment, design, migration, validation, optimization, and security.
* Utilized **Packer**, **Terraform**, AWS Lambda, and **DynamoDB** for streamlined configuration management, provisioning, and efficient event-driven workflows in a **serverless setup**.
* I actively worked with **AWS** **Kinesis** services to receive and analyze data from AWS IoT, leveraging real-time data ingestion and analysis for efficient processing and actionable insights from IoT data.
* Containerized legacy Java and Node.js applications in **AWS** **Elastic** Kubernetes Service with auto-scaling.
* Designed and configured **Azure** **Virtual** **Networks**, subnets, DHCP, DNS, security policies, and routing
* Designed **Ansible Playbooks** to automate configuring **Apache**, **Tomcat**, **Nginx**, increasing efficiency and reliability in **infrastructure** management.
* Designed and developed **AWS CI/CD pipelines** with CodePipeline, CodeBuild, and CodeDeploy, automating software delivery for efficient integration, testing, and deployment.
* Deployed web apps (Java, PHP, Python, Docker) swiftly with AWS Beanstalk for scaling and load balancing.
* Implemented **JIRA** for ticketing and tracking, and utilized Confluence for collaboration, enhancing project management and team communication.
* Installed and managed **Nagios** for resource and network monitoring, ensuring proactive issue detection and optimal infrastructure performance.
* Created **Python scripts** for log rotation and shell scripts for automation, improving system maintenance and task efficiency.
* Implemented **OpenShift** on AWS for container management, including integration, deployment, and scaling.
* Integrated **Jenkins** for continuous integration and delivery, automating software building, testing, and deployment processes for streamlined software delivery.
* Utilized **Nexus** as a repository manager for artifact management, ensuring efficient storage and distribution of software artifacts.
* I utilized **Maven** as a versatile build automation tool, facilitating efficient dependency management, compilation, testing, and packaging of software projects.
* Leveraged **Linux** as the operating system for AWS instances, ensuring reliable and optimized performance in cloud-based environments.

**Technical Tools:** AWS, Terraform, VMware, AWS Beanstalk, Packer, AWS Kinesis, AWS Lambda, DynamoDB, EKS, Azure Virtual Networks, AD FS, Ansible, AWS Code Pipeline, AWS Code Build, AWS Code Deploy, JIRA, Confluence, Nagios, OpenShift, Chef, Jenkins, Nexus, Maven, Linux.

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| **Client: L&T Technology Service, Bangalore**   **Duration: July 2018 - Aug 2019 Role: Build & Release Engineer**  |

**Responsibilities**:

* Set up backup server and disaster recovery plans for **Jenkins**.
* Configured Jobs for **Plugin Management**, Build/Deploy pipeline setup, and User management.
* Integrated **Git and Maven with Jenkins** for continuous integration (CI) process.
* Implemented Nightly Builds using SCM polling option for updated Artifactory in Nexus.
* Automated build processes using **Ant, Maven**, and **Python**.
* Identified and resolved build failures by analyzing console output.
* Configured GitHub web hooks for automatic build triggers with JIRA tickets.
* Developed and maintained **Python** scripts/tools for automated testing builds and deployment.
* Implemented **Nagios** for continuous monitoring of applications and enabled notifications.
* Troubleshooted and performed performance tuning on firewalls, load balancers, and virtual routers.
* Installed and configured Jenkins on **Linux machines** for Java builds and Docker image publishing.
* Created parameterized jobs in Jenkins for different environments.
* Managed source repository using Git and Jenkins for continuous integration.
* Developed automation scripts in Python using **Chef** for Java application deployment on Linux servers.
* Implemented security measures for web applications on **Linux** platforms.
* Utilized AWS (Amazon Web Services) for cloud infrastructure provisioning, deployment, and management.

**Technical Tools:** Jenkins, Git, Maven, Ant, Python, Nexus, GitHub, JIRA, Nagios, Docker, Chef, Linux, AWS.

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| **Client: Cyient Ltd, Hyderabad, India Duration: March 2017 - June 2018** **Role: System Administrator**  |

**Responsibilities:**

* Managed server builds, deployments, and led the smooth migration of Red Hat Linux servers.
* Collaborated with the application team to swiftly resolve post-migration issues.
* Configured **Red Hat Linux 3.x** and **Solaris 8 and 9** environments across production, staging, and test setups.
* Implemented the Legato backup and restore solution, including installation of Legato client on Red Hat Linux servers.
* Developed Python merge jobs to extract and load data into MySQL databases.
* Utilized Perl CGI, **Python**, **JavaScript**, **jQuery**, and Ajax to develop impactful features and functionalities.

**Technical Tool:** Nagios, Red Hat Linux, Solaris 8/9, Legato, Python, Perl, JavaScript, jQuery, Ajax, Windows, Linux.

**Education:**

Master of Science in Computer Science – State University of New York at Binghamton
Bachelor of Technology in Computer Science & Engineering – JNTU Kakinada

