**Sudharshan Bandaru**

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**Specialties:**

Highly skilled Site Reliability Engineer with 10 years of experience in developing and implementing system monitoring and alerting tools, disaster recovery plans, and automation and configuration management tools. Proven track record in reducing system downtime by up to 40%, improving system availability and security, and enabling organizations to scale their infrastructure to support a 50% increase in customer base. Collaborative team player with exceptional skills in technical leadership, problem-solving, and proactive issue resolution.

Experience with DevOps and SRE methodologies in Cloud services (AWS), Azure Server provisioning, middleware management, build and deployment automation through tools like Jenkins, Chef, GIT, Splunk, AppD, Docker and Kubernetes etc.

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| Professional Summary |

* Manage patch and installer releases for an enterprise product supported on all Unix and Windows environment.
* Extensive experience in developing, building and deployment of Java applications.
* Understanding in software design and Object-Oriented Programming concepts.
* Experience in deploying of Java, J2ee applications on Tomcat, JBoss and Web sphere admin console.
* Experience in using Software Configuration Management (SCM) tools including SVN, GIT, and Stash.
* Responsible for merging, tagging and conflict resolution in **GIT** and **Gerrit.**

### Extensively worked on Hudson/Jenkins and Bamboo for continuous integration and for End-to-End automation for all build and deployments.

* Hands on experience in **AWS** provisioning and good knowledge of AWS services like **EC2, S3, Glacier, ELB, RDS** and **Cloud Formation and Terraform.**
* Involved in setting up **Jenkins Master**and multiple slaves for the entire team as a CI tool as part of **Continuous development and deployment process.**
* Deployed **JAR, WAR, EAR** and J2EE applications on **Apache tomcat** server using Jenkins auto deployments.

### Amazon AWS-EC2 VPC and Virtualization, VMware server Infrastructure build design DEVOPs solutions.

* Worked in managing VMs in Amazon using AWS **EC2** andMaintaining the DB backups and moved to Amazon **S3** browser using **s3cmd**.
* Hands-on experience with Infrastructure as Code, using CloudFormation, Terraform, or other tools.
* Work with Docker and help improve our Continuous Delivery framework to streamline releases and reliability.
* Experience in build and deployment automation in Shell Scripting, with CI tool Bamboo and chef infrastructure automation tools.
* Implemented a CD pipeline involving Bamboo + CHEF to complete the automation from commit to Deployment.
* Knowledge on Vagrant & Docker based container deployment to create shelf environments for dev teams and containerization of env’s delivery for release.
* Good experience working with UNIX Operating system, VI editor, FTP, and experienced in Shell Scripting Skills.
* Proficient in **Python, Shell Scripting, SQL**, build utilities like open make, **ANT** and Cruise Control.
* Experience with build tools Ant and Maven for writing Build.xml and Pom.xml for new applications and improvising the existing build scripts on need basis.
* Ability to quickly understand, learn and implement the new system design, new technologies, data models and functional components of software system in a professional work environment.
* Experience in Designing, Architecting, and implementing scalable cloud-based web applications using AWS and GCP.
* Set up a GCP Firewall rules in order to allow or deny traffic to and from the VM's instances based on specified configuration and used GCP cloud CDN (content delivery network) to deliver content from GCP cache locations drastically improving user experience and latency.
* Experienced with setup, configuration and maintain ELK stack (Elasticsearch, Logstash and Kibana)
* Working with development and QA teams to design Ingestion Pipelines, Integration APIs, and provide Elasticsearch tuning based on our application needs.
* Responsible to designing and deploying new ELK clusters (Elasticsearch, Logstash, Kibana, beats, Kafka) etc.
* Working in high-complexity customer facing projects, enhancements, and maintenance releases.

**Technical Summary:**

# Build Tools : Ant, Maven, Gradle.

Scripting Languages : Shell, Ruby, Bash, Groovy and Python Boto3.

Configuration Management : Subversion, GIT, Stash, GitHub

CI Tools : Jenkins, Bamboo

Operating Systems : Windows, UNIX, RHEL.

Web/Application Servers : Tomcat, Apache, HTTP Server, WebLogic, Jboss,

Bug Reporting Tools : JIRA and Rally.

DevOps : Chef, Docker, Kubernetes, vSphere, Kafka, Terraform, AWS (Amazon Web Services), and Microsoft Azure.

**Education Qualifications**

**01/14 - 08/15 Master’s in computer science,** Governor’s State University, Chicago, IL. **GPA: 3.75/4.00**

##### **Work Experience:**

**Amdocs / AT&T, Dallas, TX**

Role: Kubernetes & Cloud Engineer Mar’2021 – Sep’2023

**Roles & Responsibilities:**

* Administrating and supporting company’s Azure Kubernetes infrastructure, ensuring it is secure, resilient and performance and responsible for complete DevOps activities and coordinating with development team.
* Working as Kubernetes Administrator, involved in configuration for web apps, Azure App services, AZURE Application insights, Azure Application gateway, Azure DNS, Azure traffic manager, App services.
* Setting up the complete Azure Kubernetes Dev Environment from scratch to deploy latest tools which is related to Deep learning and machine learning using helm charts on premises BareMetal for different teams.
* Configured V-net integration, Active directory, Encryption, and security on Azure using ARM templates and PowerShell scripts.
* Responsible to configure alert notification to monitor CPU metrics, VM health’s and events logs.
* Deployed VNETs and site-site VPN using PowerShell and deployed VMs into various subnets and enabled communications between subnets.
* Successfully created Kubernetes pipeline of deployment & operation activities where all code is written in java, python & stored into bitbucket, for staging & testing purpose.
* Preferable Azure by creating multilevel hybrid pipeline of CI & CD helped clients to achieve Kubernetes platform.
* Automated various infrastructure activities like Continuous Deployment, Application Server setup, stack monitoring using Ansible Playbooks using Jenkins.
* Implemented cluster services using Docker and Azure Kubernetes services (AKS) to manage local deployments in Kubernetes by building a self-hosted Kubernetes cluster using Jenkins CI/CD pipeline.
* Developed and designed Azure DevOps Pipeline to manage the resources across multiple subscription in Azure.
* Maintained and automated the scripts by using Python for automated deployments.
* Deployed an **Azure Databricks** workspace to an existing virtual network that has public and private subnets and properly configured network security groups.
* Worked on **Azure Databricks** to use custom DNS and configure **network security group (NSG)** rules to specify egress traffic restrictions.
* Familiar with helm charts for deployment manager to use of charts and templates for listed file names.
* Implemented Pod security policies (PSP) in AKS for required best practices and the ability to control what pods to be controlled, scheduled in AKS cluster prevents some possible security vulnerabilities or privilege Escalations.
* Familiar with all objects and components in Kubernetes like Istio-system, ingress controller, kube-system and deploying pods in selected nodes without any downtime for Dev and Prod Kubernetes clusters.
* Experienced working in Istio installation to enable Node to Node encryption on Azure Kubernetes service for Security requirement that intercepts all network communication between micro services.
* Implemented HTTPS Ingress controller and use TLS certificate on AKS to provide reverse proxy, configurable traffic routing for individual Kubernetes services.
* Moved all Kubernetes container logs, application logs, event logs and cluster logs, activity logs and diagnostic logs into Azure Event Hubs and then into Splunk for monitoring.
* Daily monitoring production servers using Grafana and Prometheus which is integrated with Kubernetes, exceptions, and report to the team if something happen during standups.
* Developed, maintained, and provided the team with various Azure DevOps related tools like deployment tools, staged virtual environments, and provisioning scripts.

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**Intuit Inc, Frisco, TX**

Role: Site reliability / Cloud engineer Mar’2018 – Feb’2021

**Roles & Responsibilities:**

* Implemented and contributing Chef best practices for OIP (One Intuit Pattern) including Foodcritic, Rubocop, Berkshelf and **Test Kitchen** to facilitate a more natural cookbook development workflow.
* Contribute to the development and maintenance of automation tools used in the management of our infrastructure.
* Designing CI/CD for different services hosted in Data Center, Cloud (EC2) or in K8S, defining SLO/SLA/SLI and maintaining them.
* Wrote Terraform modules for Services such as S3, SNS, SQS, RDS, EC2, EKS, Lambda's
* Spearheaded the migration of 15 customer facing applications from on-premises data centers to AWS within 6 months.
* Reduced new service deployment time from 4 weeks to 1 day by creating a template cookbook and CFT's for spring boot services in CG
* Achieved 25% reduction in monthly AWS costs by improving efficiency and implementing authoring automatic shutdown scripts for unused EC2 and RDS resources.
* Implement and maintain monitoring solutions at the server and application level to increase visibility into day-to-day operations and issues, utilizing Splunk, Wavefront, and AppDynamics to detect issues affecting critical customer experiences and generate KPIs for management.
* Worked on Docker and Kubernetes to manage micro-services for development of continuous integration and continuous delivery and deployed applications on AWS clouds.
* Implemented end to end application deployment framework for microservices using AWS CloudFormation‎, Terraform, ECS and Jenkins Pipeline as code.
* Setup Continuous integration with Jenkins and make use of wide range of plugins available to setup smooth developer friendly workflows.
* Used Chef for configuration management of hosted Instances within AWS. Configuring and Networking of Virtual Private Cloud (VPC).
* Set-up databases in AWS using RDS, storage using S3 bucket and configuring instance backups to S3 bucket. prototype CI/CD system with GitLab on EKS utilizing kubernetes and Docker for the runtime environment for the CI/CD systems to build and test and deploy.
* Building/Maintaining Docker/ Kubernetes container clusters managed by Kubernetes Linux, Bash, GIT, Docker, on GCP
* Involved in design, implementation and modifying the **Python** code.
* Creating scripts in DSL Groovy which integrate with Jenkins for Automation to create seed jobs.
* Written some Groovy scripts for setting up LDAP configuration for Jenkins using security matrix.
* Developed **Python, chef** and **shell scripts**for automation of the build and release process.
* Implemented DR solution using Cloud formation templates and data replication using AWS libraries.
* Implemented security solutions for the applications using tools such as Contrast and Signal Sciences
* Demonstrable knowledge of TCP/IP, HTTP, application security, monitoring and storage
* Act as top-tier on-call support for critical uptime business applications to maintain availability and minimize downtime during outage scenarios.
* Migrate Data from Elasticsearch-1.4.3 Cluster to Elasticsearch-5.6.4 using Logstash, Kafka for all environments.
* Infrastructure design for the ELK Clusters.
* Responsible for designing and deploying new ELK clusters (Elasticsearch, Logstash, Kibana, beats, Kafka, zookeeper etc.
* Working in high traffic, fault tolerant & high available 24\*7\*365 environment, On call for production support

**NBC Universal, Los Angeles, CA**

**Role: Devops Engineer. Oct’2014 – Mar’ 2018**

**Roles & Responsibilities:**

Working in DevOps Team that supports many customers facing and backend applications involving various infrastructure technologies, ensuring all releases meet established project objectives,

* Source control systems like Stash and GIT set up and maintenance.
* Branching and merging is done every day on various code bases in different projects.
* Developing various cookbooks and recipes to fit in our infrastructure-using chef.
* Participated in the full release project life cycle, which involves deployments in various environments like DEV/QA/PROD.
* Responsible for managing infrastructure provisioning (S3, ELB, EC2, RDS, Route 53, IAM, and Security groups) and deployment via EC2 installs with Centos, Ubuntu and RHEL.
* Wrote build scripts using Ant and Maven for our Java applications.
* Implementation of continuous integration by taking developers commits at regular intervals, build the artifact and store it in Artifactory.
* Developed Chef Recipes to configure, deploy and maintain software components of the existing infrastructure.
* Integrated Ant and Maven with Jenkins to run to automate the build process as a part of continuous delivery.
* Repaired broken chef Recipes and corrected configuration problems with other chef objects.
* Worked on the automation of middleware configuration work through chef.
* Deployed and maintained Chef role-based application servers, including Apache, Nginx, and Tomcat.
* Setup from scratch Continuous Integration (**CI**) environments (Jenkins on AWS ec2 over vpc) complete with automated unit testing and Code Coverage tools.
* Created **Maven POMs** to automate the build process with Jenkins for the new projects and integrated them with third party tools like **Sonar**, **Nexus.**
* Involved on Container based deployments (Docker) with Chef configuration management tool.
* Minimize downtime by implementing fail over of different components of a service to avoid single point of failure.