# PRATHYUSH D

**DevOps/Cloud/Site Reliability Engineer**

**+1 361-228-2871 prathyush.devops@gmail.com**

***Professional Summary:***

* Experienced in creating, configuring and maintaining Infrastructure on AWS Cloud services including Virtual Private Cloud (**VPC**), **EC2**, **RDS**, **S3**, **Route53**,**SNS**, **CloudFront**, **CloudWatch** and **IAM**.
* Experienced in **migrating infrastructure** from **on premise to Amazon Web Services cloud**
* Experienced in creating various dashboards, metrics, alarms and notifications for servers using **AWS Cloud Watch**, **Grafana** and **ELK**.
* Experienced in migrating monolith applications to microservices in AWS.
* Experienced in creating complex IAM policies, Roles and user management for delegated access within AWS.
* Experience working with version control systems like Subversion, GIT and used Source code management tools **GitHub**, **GitLab**, **Bitbucket** including command line applications.
* Implemented a **CI/CD** pipeline involving **BitBucket**, **Jenkins**, **Puppet**, **Docker**, and **Python** for complete automation from commit to deployment.
* Design and implementation of a **Puppet-based configuration management system** for all new Linux machines.
* Experienced in Bug/Issue tracking tool like Bugzilla, **JIRA**.
* Knowledge of Software Development Life Cycle Methodologies Waterfall, and **Agile**.
* Experienced in multi platforms like UNIX, Ubuntu, RHEL and Windows 98/XP/Vista/7/8/10 supporting production, test, and development environments.
* Strong work ethic with good Interpersonal and Organizational skills.
* Ability to work under minimal supervision and guidance

**Technical Skills:**

* Programming -- Shell, Python, Perl, Java, JavaScript.
* Build Tools -- Jenkins, Buildforge
* Deployment tools -- RUNDECK, CodeDeploy
* Configuration/Orchestration tools – Puppet, Ansible
* Monitoring Tools -- ElasticSearch, Logstash, Kibana, Grafana, Graphite
* Clouds – Amazon Web Services (AWS)
* Containerization – Docker, Kubernetes
* Databases -- MYSQL, SQLite
* Operating/Application Stacks -- Linux, Tomcat, Apache, Ruby
* Data Analytical tools -- R, SAS
* Version Control Tools – Clearcase, SVN, GIT

**Education:**

* Masters of Science in Data Analytics: Western Governors University (2018 – 2019)
* Masters of Science in Chemistry, Texas A & M University (2013 – 2015)
* Bachelors of Pharmacy, Osmania University, India (2008 – 2012)

**Professional Experience:**

**3M, Salt Lake City, UT Dec 2019 – Present**

**Role: Cloud System Engineer**

* Worked in setting up the linux infrastructure with Puppet and Puppetforge.
* Involved in migration of on-premise Elasticsearch to Elasticsearch domain in AWS and also automated the migration of data (in PB) into S3 snapshots.
* Involved in setting up of email service (postfix) at the enterprise level with the help of Puppet, python and AWS cloudformation.
* Implemented CI/CD pipelines for a major application in AWS.
* Developed a monitoring tool and notify the team on patching through Katello.
* Worked in setting up the infrastructure with Ansible and orchestrating the containers through kubernetes.

**SOUTHWEST AIRLINES, Dallas, TX Apr 2017 – Nov 2019**

**Role: Aircraft Tracking, Devops Engineer**

* Implemented fully automated CI/CD pipelines with testing for important Enterprise Operations Suite using Jenkins, Docker and AWS.
* Involved in writing scripts to automate the build and deployment process across all enterprise environments.
* Collaborated with multiple development teams to migrate monolith applications to microservices.
* Worked in developing python APIs as part of enterprise dashboard development to communicate with many enterprise services.
* Involved in migration of multiple applications into AWS, assist in writing docker files and creating multi branch pipelines through infrastructure as code.
* Analyzed and monitor performance bottlenecks and key metrics to optimize software and system performance.
* Implemented monitor dashboards (Grafana, Hygeia) for multiple applications configuring with multiple collectors (Jira, Jenkins, Bitbucket, Sonar).
* Integrated multiple applications to monitor enterprise applications and developed customizable real-time dashboards with data from users from different environments to monitor application performance and infrastructure.
* Experienced in writing CloudFormation templates in YAML and JSON format to build the AWS services with the paradigm of infrastructure as code.
* Worked for POCs to implement ELK (ElasticSearch, Logstash and Kibana stack) in AWS and to automate the data flow through AWS Kinesis and Firehose.
* Matured knowledge on writing dockerfiles and troubleshoot of any container related issues.
* Amazon IAM service enabled to grant permissions and resources to users. Managed roles and permissions of users with the help of AWS IAM
* Configured AWS Multi Factor Authentication in IAM to implement 2 step authentication of user's access using Google Authenticator and AWS Virtual MFA
* Worked in writing Ansible playbooks to deploy Kubernetes to different environments.

**SOUTHWEST AIRLINES, Dallas, TX October 2015 – March 2017**

**Role: Devops Engineer**

* Collaborated with different teams for branching strategies, build and release process to attain the successful releases of legacy and SWA Operations Suite into Production
* Involved in migration of on-premise infrastructure to AWS and maintained the cloud infrastructure
* Created Python scripts to totally automate AWS services which includes web servers, ELB, CloudFront distribution, EC2, database, security groups, S3 bucket and application configuration, this script creates stacks, single servers, or joins web servers to stacks.
* Worked in integrating third party monitoring tools with AWS deployment using Ansible to collect data from all EC2 systems into Grafana.
* Analysis and troubleshooting during deployment and co-ordination with various support teams.
* Worked in migration of code from various version control tools to git and from ant to gradle.
* Developed and designed multiple Python APIs for enterprise service dashboard to integrate with multiple Atlassian tools.
* Performed data analysis in Python at service level to predict the performance of application and to find out the possible issues from it.
* Worked in scraping data from enterprise tools to automate the complete CI/CD pipelines.

**Delve Infotech, IND Jan 2012 – Dec 2012**

**System Engineer**

* Developed custom scripts to increase the system efficiency by 60% and lower downtime as part of configuration and maintenance of enterprise infrastructure.
* Developed an enterprise dashboard UI to publish status of multiple applications from several nodes throughout the organization.
* Administered and maintained end user accounts, permissions and access rights for enterprise infrastructure
* Managed the build environment and the IBM Clearcase source code control system.
* Implemented automated solutions with PERL and CMD scripts to prevent and identify build issues.
* Created shell scripts and cron jobs that monitored and reported security issues.
* Managed, monitored and tested individual and group user access privileges and security.
* Monitored system performance and prevented resource exhaustion using ssh, sar, vmstat, iostat, netstat and nmon.
* Maintained security and mitigated threats as new ones were identified.
* Wrote Unix/Perl Shell Scripts for day-to-day system administration activities and perl.

**Walmart, IND Mar 2011 – Dec 2011**

**Software Intern**

* Worked with various teams to gather, analyze data and prepare documents using Microsoft Excel and SQL.
* Worked with Business Analysts to secure the requirement from users and helped in delivering the product to the organization.
* Provided proof of concept to attain the continuous development thus reducing the manual intervention.
* Implemented and maintained Visual Source Safe as version control system.
* Designed and implemented web-based build automation.
* Worked in Writing Makefiles and scripts for automation.
* Worked in managing Regular builds, monitoring cron jobs, running testlibs and reporting status.