

Sivakumar Vunnam

Email: sivakumarvunnam1@gmail.com In: <https://www.linkedin.com/in/sivakumarvunnam/> Ph: [+1\(603\)-943-9002](tel:+16039439002)

SUMMARY

- Successful DevOps Engineer with Over 7 years of professional Experience dedicated to Cloud, DevOps automation and Cloud Infrastructure as code focused on (cost optimization, cloud governance). I enjoy Designing, Implementing, and Supporting applications in the AWS, GCP, Azure cloud infrastructure. I’m a highly motivated, productive team player looking to lead by example. Enthusiastic about exploring new services in the DevOps and MLOps area. My greatest strength is my ability to thoroughly research a requirement and design a solution that is cost-effective, resilient, fault-tolerant, and highly available. Using my cloud expertise, I have greatly contributed to multiple successful migrations to AWS from on -premise infrastructure.

TECHNICAL SKILLS

Build Tools/Web/App Servers: Git, Jenkins, Maven, Artifactory, SonarQube, Nginx, Apache, Tomcat, JBoss
Cloud/Container Tech: AWS, GKE, Docker, PodMan, Kubernetes, Vagrant, Packer
Continuous Deployment: Jenkins, ArgoCD, Flux CD Spinnaker
Virtualization/Bare Metal Hardware: VMware, vSphere, vCenter, Dell, Super Micro
Configuration Management/ Infra as Code: CloudFormation, Terraform, Ansible, Salt Stack
Programming Languages: Shell Script, Python, Angular
OS/Protocols/Database: Linux, Windows, TCP/IP, DNS, DHCP, MySQL, AWS DynamoDB, Postgres
Monitoring/Log: New Relic, EFK, Splunk, Prometheus, Grafana

INDUSTRIAL EXPERIENCE

Senior DevOps Engineer, Avetta LLC, Lewisville, TX Jul’21-Present

- Member of DevOps Team responsible for worksite safety environment. writing **Terraform Private modules** as infrastructure as code (IAC) and creating **AWS EKS** cluster with Autoscaling enabled feature, **AWS load balancer Ingress** with end-to-end better observability using **EFK** and **New Relic**.
- Designed continuous integration process for terraform modules as infrastructure as code (IAC) using **GitHub Actions** and **Terraform Cloud**.
- Worked on connect and worksite safety applications to convert Kubernetes manifests file to use **Helm charts** for Kubernetes deployments. Created Private Helm Chart repo with S3 Bucket.
- Came up with solution to use GitOps methodology using **ArgoCD** for continuous deployments for all environments.
- Working on Salt Stack to manage exiting AWS Infrastructure and self-Managed Kubernetes deployments using Jenkins. Travis-CI for Continuous Integration.
- Worked on baking **AMI** for EC2 and EKS using **Packer** and **GitHub Actions**.

Technologies Involved: Terraform, Kubernetes, Docker, Helm, ArgoCD, Jenkins, BlackDuck, Scala, NodeJs, ELM, EFK, Grafana, Prometheus, New Relic, GitHub Actions

Senior Developer, Epsilon Data Management LLC, Irving, TX Mar’21-Jul’21

- Develop Automation platform for delivering and managing Cloud and On-Prem infrastructure including, OpenStack, AWS and physical servers. Analyze current technology utilized within the company and develop steps and processes to improve and expand upon them
- Support cloud and On-Prem servers including security configurations, patching, and troubleshooting. Fluentd (td-agent) scrapes logfiles for specific error messages and sends the message, hostname, and tag metrics to Prometheus. Prometheus rules are setup to capture these metrics and generate an email alert.
- Design, automate and support CI/CD stack, infrastructure as code, monitoring, and logging
- Expertise in CI/CD environments and working with the engineering teams to accelerate the efforts to design and operate cloud services

Technologies Involved: Terraform, Kubernetes, Docker, Helm, Spinnaker, Jenkins, SonarQube, Java, EFK, Grafana, Prometheus, Consul

Staff DevOps Engineer, Blackhawk Network Inc, Lewisville, TX Sep’18-Mar’21

- Member of the Global DevOps organization at Blackhawk Network responsible for standardizing, provisioning, and supporting infrastructure for distributed applications.
- Cloud Governance:** Standardize the creation of several AWS resources using AWS Service Catalog. This helps our centralized DevOps team define and set standards for resources created using template level constraints and automatic tagging of resources.
- Cost Optimization:** Lead a team to implement mixed instance types in EC2 Auto Scaling Groups across all our AWS accounts. This update has seen us launch spot instances wherever applicable and has reduced EC2 costs by over 50% per month in our non-prod accounts.
- Migrated to Application Load Balancer is more cost effective than Classic Load Balancer. For CLB's with high resource utilization, migrating to ALB saved 47% per month on our production accounts.
- Accomplished immutable infrastructure using **CloudFormation** and **Terraform** to deploy infrastructure in cloud/on-premises. Accomplished Setting up the build and deployment automation for Dev, Preproduction, Production environment using **Terraform** with **Terragrunt** as a wrapper
- Expertise in building Continuous Integration and Continuous Delivery (CI/CD) on AWS environment using AWS Code Commit, Code Build, Code Deploy, and Code Pipeline and experience in using AWS **Terraform**, AWS CloudFormation, API Gateway, and AWS Lambda in automation and securing the infrastructure on AWS.
- Implemented and improved Jenkins **CICD** process using shared libraries for Java, Angular, Nodejs, Django, Python, Ruby & Rails languages. Unit Tests, Xray, SCA Scan using Jenkins DSL, Shell and Groovy programming. Wrote custom Jenkinsfiles to call different stages and build components of shared libraries to help engineers reduce the time of build and deployment.
- Saved 40K in cloud hosting and improved performance by migrating monolith applications to modern microservices architecture and deployed into **ECS Faregate/Kubernetes**.
- Worked with the development team to configure New Relic APM, to trace the performance of API’s, Infrastructure agents in servers and setup alerts. To reduce troubleshooting time, configured ELK clusters using Elasticsearch. Configured dashboards and visualizations in Kibana

Technologies Involved: CloudFormation, APIGateway, Lambda, ECS, EKS, RDS, Docker, Helm, Jenkins, SonarQube, Jfrog, EFK, Grafana, Prometheus, Consul, Packer

Senior DevOps Engineer, Saibersys Inc | Nexient Inc, Ann Arbor, MI Oct’17-Aug’18

- Cloud Migration:** Worked on a time-critical migration project called Hawk Incentives to successfully migrate all components (web, app servers and databases, Windows AD) of an acquisition made by Blackhawk Network from on-premises to AWS. This resulted in cost savings of over 40% monthly.
- Automated Java Spring, ruby on rails, Nodejs application build, deployments process using Jenkins, CloudFormation, Code Deploy. Configure d Apache gateways, New Relic and ELK for Monitoring and logging.
- Cloud Security:** Collaborated with the InfoSec team to provision and configure several third-party tools such as Rapid7, Red lock (Prisma cloud) for maintaining governance and enforcing compliance across three of our production AWS accounts.
- Reduced Docker images size by 40% which saved server resources like CPU and memory by using multistage Docker files and deployed them in ECS/EC2. Involved in migrating to microservices architecture from legacy monolith architectures.

Technologies Involved: CloudFormation, APIGateway, Lambda, ECS, EKS, RDS, Docker, Helm, Jenkins, SonarQube, Jfrog, EFK, Grafana, Prometheus, Consul, Packer

- Senior DevOps Engineer, Saibersys Inc | HGST a Western Digital, San Jose, CA

Jul'16-Aug'17
- Automated Installation, configuring and administration the Linux VM's on ESXI servers Using Vagrant and Implemented the automated factory installation on Active Scale X100 and Active Scale P100 hardware, Supporting TAAS (Test Drive as a Service) multiple geographical locations from Belgium, Las Vegas, and San Jose.
 - Experience in writing the YAML files for Jenkins Job Builder for Dynamic Jenkins jobs configuration. Installation, configuration, and administration experience in revision management tool Gitlab, Jenkins, Maven, Nexus, Docker, Kubernetes.
 - Written Dockerfiles to Isolate Java Spring, Python Django, Nodejs, Angular, applications images using docker.
 - Used Docker Compose and Docker Swarm to deploy Dockerized images applications on ubuntu Linux 16.04 VM's and Setting up alerting and monitoring of our infrastructure using Prometheus and Grafana

- DevOps Engineer, Saibersys Inc | Cisco, San Jose, CA

Dec'15-Apr'16
- Handling day to day tickets opened in JIRA ticketing system. Setting up Continuous Integration and Continuous Deployment process using Git, Jenkins, Maven, Nexus, SonarQube, Tomcat application servers instances.
 - Developed Ansible Playbooks and roles to launch Jenkins's master, nodes, plugin installation, system configuration and configure all Jenkins jobs. Implemented Infrastructure as code which eliminated manual changes to Jenkins jobs and misconfigurations
 - Migrating source code repositories from centralized version control system (SVN) to Distributed version control system (Git)

- Build and Release Engineer, Unwired Labs, Hyderabad, Telangana

Jan'13-Jul'14
- Worked on Installing, Configuring, and Administration tasks in the Gitlab Source code management tool. Implemented Continuous Integration and continuous deployment using Gitlab, Jenkins, Maven, Nexus Ansible.
 - provisioning virtual machines on-premises using vagrant and responsible for setting up Cron jobs scripts on production servers.
 - Maintained protocols like TCP/IP, NIS, NFS, DNS, SNMP, VSFTPD and DHCP FTP and Samba on Linux systems.

EDUCATION		
RIVIER UNIVERSITY, Nashua, NH (USA)	Master's in computer science	Aug'14-Dec'15
GPA: 3.82/4		
Acharya Nagarjuna University, GUNTUR (India)	Bachelor's in computer science	Sep'09-May'13
GPA: 3.4/4		

- CERTIFICATIONS
- AWS Certified Solutions Architect Associate (saa-c01)
 - CKA: Certified Kubernetes Administrator (https://www.credly.com/badges/df6d5e78-c1e1-4b40-abcf-1472b3d17f7f/linked_in)
 - DevOps Foundations: Going Cloud Native
 - Running Kubernetes on AWS (EKS), Splunk 7.x Fundamentals