

KRISHNA AMILINENI

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Professional Summary

Dedicated and Passionate Software Professional with 12+ years of comprehensive experience in the design, development, deployment, maintenance and monitoring of applications in the multi-cloud environments. Experienced in **AWS, Microsoft Azure and Google Cloud** with a focus on **DevOps** practices and **Site Reliability Engineer** for **Web and Mobile Applications**.

- I have successfully designed and implemented **continuous delivery** pipelines for a diverse range of applications, leveraging various technologies.
- Implemented infrastructure as code best practices, using variables, modules, and remote state storage, to enhance reusability, scalability, and maintainability of **Terraform** code.
- Implemented **continuous integration and continuous deployment (CI/CD) pipelines on Azure Devops and GitLab**, automating the software delivery process and reducing deployment cycles.
- Extensive experience in **Docker** and **Kubernetes containerization**, effective packaging applications, and dependencies into portable containers, ensuring consistent and reproducible deployments across various environments.
- Deployed a managed **Kubernetes cluster** in AWS/Azure through **AKS** and **EKS** establishing clusters via the **AWS/Azure CLI** and used template-driven deployment approaches and focusing on deploying and managing containerized applications.
- Implemented **CI/CD** pipelines using **GitHub Actions**, **Gitlab CI**, **Jenkins**, and **AWS Code Pipeline**.
- Provide deployment and hosting infrastructure support for **Frontend**, **Middleware**, and **Backend** teams to meet new requirements.
- Automated server provisioning and configuration management using **Ansible playbooks** across multi-environment deployments (**Dev, QA, STG, Prod**).
- Created and managed **JIRA boards**, including **backlogs**, **sprint boards**, and **Kanban boards**, providing real-time visibility into task status, progress, and work allocation, promoting transparency and accountability.
- Integrated **.NET (C#) projects** into CI/CD workflows with automated testing, code analysis, and artifact versioning.
- Created custom **Datadog** dashboards and **Dynatrace** visualizations to analyze and visualize collected metrics, enabling in-depth analysis, capacity planning, and performance optimization.
- Proficient in helping **development** team to setup code quality analysis using **SonarQube**.
- Strong knowledge in **AWS/GCP IAM** policies , **Microsoft Entra ID** and SCP Organisations, with experience in creating and managing **IAM** policies for AWS, Azure and GCP services and resources.
- Proficiently managed and **orchestrated micro-services**, ensuring seamless deployment and efficient utilization of resources.
- Skilled in scripting languages including **Power Shell**, **Bash**, **Shell Script** and **Python** to automate build and release process.
- Exposure to all aspects of **Software Development Life Cycle (SDLC)**.

Technical Expertise

Amazon Web Services, Azure, Google Cloud and Devops Major Service/Tools:

Compute - EC2, Azure VMs, Compute Engines, VMware

Network - VPC, Route53, VNet, VPN Gateway

Storage - S3, EFS, Azure Disks, Storage Gateway, Cloud Storage

Database - Amazon RDS, Postgres SQL, MySQL, Dynamo DB, Azure Cosmos DB, Redshift

Security - AWS IAM, Azure Active Directory Services, GCP IAM

Monitor Tools - Datadog, AWS Cloud watch, Azure Health, Grafana, Kafka, Kibana, Dynatrace

Vulnerability Screening & Cyber security screening - Invicti (Net sparker), Dark trace

Code Quality & Build Tools - Sonar Qube, Maven

Source Code Management - GIT, SVN, Azure Repos, Bitbucket, GitLab

CI/CD (Continuous Integration/Deployment/Delivery) - Jenkins, Azure devops, Gitlab, Agro CD

Automation Containers - Docker, Kubernetes, ECS, AKS, Lambda

Operating Systems - Linux, Ubuntu, Windows, CentOS, Mac OS

Infra Provisioning&Configuration Tools- Terraform, ARM, AWS Cloud Formation, Ansible, Chef

Programming/Scripting Language - .NET, Bash, Shell script, Python, Json, YAML, PowerShell

Education

- Bachelor of Engineering - Electronics Engineering.
Anna University Chennai - Nov 2011.

Certifications

- AWS Certified: Solutions Architect Associate (AWS-SAA).
Validation Number – G4TFRZS2GEBE1MSV.
 - Microsoft Certified: Azure Administrator (AZ-104).
Validation Number – H484-9281.
 - Harshicorp Certified: Terraform Associate (TAC-003).
Validation Number – UC-4b26d642-3203.
 - The Linux Foundation: Certified Kubernetes Administrator (CKA).
Validation Number – LF-s81a1s97a6.
 - Microsoft Certified: Azure Fundamentals (AZ-900).
Validation Number – H449-5349.
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Professional Experience

Aptys Solutions, Plano, Texas, US

November 2023 - Present

Senior Cloud Devops Engineer

- Expertise with version control and source code management tools such as Azure DevOps and Azure Repos for effective code collaboration and management.
- Designed and implemented infrastructure automation on AWS using Terraform across multi-account environments.

- Developed and maintained PowerShell scripts to automate routine tasks including user provisioning, VM lifecycle management, and resource cleanups in Azure.
- Created Bash scripts for automated server patching, log rotation, and security hardening across multiple Linux-based EC2 instances.
- Designed and deployed a server-less architecture using AWS Lambda (Python) with API Gateway and DynamoDB.
- On-Call support for Product Release and Patches.
- Worked on CI/CD pipelines using Azure DevOps to build, test, and deploy applications on Azure services.
- Integrated observability tools with CI/CD pipelines for automated alert testing and pre-deployment validation of performance baselines.
- Managing multiple corporate applications in Azure DevOps, Azure Repos code management repositories and creating & granting access for users related to Azure DevOps project directories for the code changes.
- Developed Python scripts utilizing AWS API calls to automate resource management tasks, ensuring efficient deployment and maintenance of AWS resources.
- Expertise in designing event-driven systems using Lambda. Experience in configuring event sources, such as Amazon S3, Amazon DynamoDB, Amazon Kinesis, or AWS Simple Notification Service (SNS), to trigger Lambda functions and monitoring through CloudWatch in response to events.
- Built and deployed the application code using CLI Kubernetes like Kubectl, Kubelet, kubeadm, and scheduling the jobs using Kube-scheduler.
- Leveraging Terraform to manage various Azure resources, such as Virtual Machines (VMs), Virtual Networks, Subnets, NSGs, Azure Storage, and more.
- Developed a modular, reusable automation test framework using [Selenium/Cypress], reducing test maintenance overhead by 40%.
- Implemented and configured Azure services to enhance security, scalability, and performance of cloud-based solutions, adhering to best practices.
- Implemented automated unit and integration test execution for .NET (.cs) files during CI to ensure build quality and stability.
- Developed Python scripts using boto3 to automate provisioning and configuration of EC2 instances, S3 buckets, and RDS databases.
- Deployed and managed micro services on Kubernetes clusters, enabling auto-scaling, rolling updates, and zero-downtime deployments.
- Implemented CI/CD pipelines to build, test, and deploy containers into ECS/EKS using Argo CD.
- Developed and deployed multiple projects in Azure DevOps to support Development and QA teams in instant Pay, Aptys Common , RTP and API access manager projects.
- Automated deployments of PostgreSQL databases on AWS RDS, including backup/restore, schema management, and replication.
- Designed and deployed a server-less architecture using AWS Lambda (Python) with API Gateway and DynamoDB.
- Created custom dashboards, service maps, and alerting policies in Dynatrace to monitor application health, infrastructure metrics, and SLO compliance.
- Containerised applications using Docker and implemented multi-stage builds to optimise image size and security.
- Configured retry policies and logging for scheduled jobs. Managed multi-stage deployments to dev, QA, and prod environments. Applied DevOps practices to manage infrastructure as code and reduce configuration drift.

- Developed and maintained Terraform configurations for multi-environment deployments (DEV/QA/STG/TEST/PROD).
- Integrated Ansible with CI/CD pipelines (Jenkins, GitLab CI) to enable automated configuration enforcement and testing.
- Created Python-based log parsers to extract metrics from CloudWatch and forward them to external monitoring systems like Datadog.
- Building images with different pre-installed applications and configurations using Packer.
- Created deployment scripts in Bash to package and deploy Python Lambda functions with Terraform integration.
- Defined and monitored SLIs, SLOs, and error budgets to enforce reliability objectives and balance feature delivery with system stability.
- Entire devops ecosystem is maintained as an individual contributor.

Asam Beauty, Munich, Germany

August 2021 - October 2023

Senior Devops Engineer

- Responsible for maintaining AWS, Microsoft Azure, and Google Cloud infrastructure.
- Automated the end-to-end setup of new project environments (including networking, security, and compute resources) using Terraform scripts.
- Created a cron-based Bash script to take daily AMI snapshots of EC2 instances.
- Built reusable test frameworks using Java and Selenium integrated with Jenkins pipelines.
- Created and managed Kubernetes namespaces, ConfigMaps, Secrets, and persistent volumes to support multi-tenant applications.
- Implemented automated backups for EC2 volumes using Bash and AWS CLI, with CloudWatch Event triggers.
- Secured Docker and Kubernetes environments by scanning container images and applying role-based access control (RBAC) in clusters.
- Troubleshooted Kubernetes networking, pod failures, and resource bottlenecks using kubectl, k9s, and log aggregation tools.
- Automated collection of custom metrics using Python and pushed them to CloudWatch for EC2 performance tracking.
- Monitored containerized workloads on Kubernetes (GKE, EKS, AKS) using Dynatrace, including pod-level visibility and service communication tracing.
- Helped in setup of Big Query, Google Analytics and Data Science projects in Google cloud.
- Responsible for release deployments in Gitlab.
- Expertise with Docker images using a Docker file, worked on container snapshots, removing Images, and managing Docker volumes. Orchestration of Docker images and Containers using Kubernetes by creating master and node.
- Expertise in Clusters using Kubernetes (EKS) and worked on creating many pods across nodes in a cluster.
- Designed and implemented end-to-end observability stacks using tools like Datadog, Dynatrace, AWS Cloud Watch, Azure Health and Google Cloud Monitoring.
- Experience in integrating CloudFormation with other AWS services like Systems Manager Parameter Store for secure parameter management.
- Skilled in administering Amazon EKS (Elastic Kubernetes Service) environments, ensuring high availability and scalability, using Nexus Repository Manager for artifact storage and dependency management.
- Used Hashicorp Vault for secrets management (storing keys, tokens, API keys, etc).

- Wrote Ansible scripts to automate provisioning of cloud resources (e.g., GCP, AWS, Azure) via dynamic inventory and cloud modules.
- Used Git version control to manage the source code and integrating GitOps with Jenkins to support build automation and integrated with Jira to monitor the commits.
- Involved in automation, strong knowledge in working with Selenium automation framework to perform smoke and regression testing using Jenkins.
- Deploy Big Query resources using Infrastructure as Code (IaC) tools in GCP. Automate updates to existing tables, including adding new columns. Develop automated rollback processes for deployment changes.
- Maintained and deployed internal NuGet packages to streamline code reuse across multiple .NET (.csproj) files and solutions.
- Developed Python scripts utilizing AWS API calls to automate resource management tasks, ensuring efficient deployment and maintenance of AWS resources.
- Managed Big Data components with a focus on BigQuery, enhancing data analytics performance for client projects. Create and manage data storage solutions using GCP services such as BigQuery, Cloud Storage, and Cloud SQL.
- Application and System logs using Python and PowerShell for all applications to proactively monitor and trace errors with automated email alerts to various teams. Installed WebSphere products using shell scripts.
- Implement data security and access controls using GCP's Identity and Access Management (IAM) and Cloud Security Command Center. Monitor and troubleshoot data pipelines and storage solutions using GCP's Stack driver and Cloud Monitoring.
- Designing and implementing GitLab CI pipelines to automate the software development process and ensure fast, reliable, and secure software releases.
- Developed robust monitoring and alerting systems using Datadog, Dynatrace, or Cloud Monitoring (AWS/Azure).
- Supporting Active Directory, Microsoft Office 365, Google analytics, Business Intelligence, Business Central, Data Virtuality, Jedox, Microsoft Dynamic NAV and ERP Applications.

Bio-Hybrid, Munich, Germany

October 2019 - July 2021

Site Reliability Engineer

- Implemented Terraform-based automation for backup policies, replication, and disaster recovery configurations for critical cloud services.
- Scheduled Python scripts using CloudWatch Events and Lambda to archive old files in S3.
- Used Bash and AWS CLI to batch-start/stop EC2 instances based on work schedules, reducing idle time.
- Reduced cloud spend by identifying and refactoring over-provisioned or underutilised Azure resources managed via Terraform.
- Responsible for creating new projects and managing pipeline deployments in Azure devops.
- Created Lambda functions (Python) to resize images uploaded to S3, triggered via S3 event notifications.
- Used Application Insights, Dynatrace to monitor performance and errors in .NET applications post-deployment.
- Improved system reliability by automating infrastructure provisioning, scaling, and configuration.
- Configured monitoring and logging using Datadog and AWS CloudWatch.

- Scheduled Bash scripts to rotate AWS access keys and store them securely in AWS Secrets Manager.
- Led the successful adoption of Agile methodologies, enabling faster and more frequent software releases. Collaborated with stakeholders to gather release requirements, set expectations, and communicate progress and changes effectively.
- Extensive knowledge of Terraform state management, workspaces, and backends to ensure efficient collaboration and state isolation within multi-team environments.
- Managed and optimised Amazon EC2 instances to ensure reliable performance and implemented data storage and retrieval solutions using Amazon S3 to ensure data durability and availability.
- Managing and monitoring asambeauty E-Commerce Web shop and Mobile applications 24/7.
- Responsible for screening security threats and phishing activities using Dark trace.
- Managed project timelines, scope, and resource allocation. Collaborated with Ops teams for continuous improvement.
- Created alerts , Monitors and dashboards for continuous tracking of cloud resources and minimising servers and applications downtime.
- Developed and maintained Terraform modules to standardize and automate infrastructure deployment across dev, staging, and production environments. Managed state files using remote backends (GCS/S3) and implemented workspaces for environment isolation.
- Used Terraform to provision VPCs, subnets, firewalls, VM instances, Cloud SQL, and Kubernetes Engine clusters on GCP. Integrated Terraform plans/applies into Jenkins pipelines with automated approval flows.
- Experience on Jenkins like Plugin Management, Performance issues, Analytics, Scaling Jenkins, integrating Code Analysis and Test Phases to complete the CD pipelines within Jenkins.
- Maintaining Bio-Hybrid web and mobile application and rolled out patches for different versions.
- Responsible for writing automation scripts for auto installation and deployment of applications in designated environments.

L&T Technology Services, Munich, Germany

August 2017 - July 2019

AWS Devops Engineer

- Design, implement and maintain all AWS infrastructure and services within a managed service environment.
- Develop and maintain security tools, scripts, and automation workflows to enhance container security operations and incident response capabilities.
- Automated the creation of IAM roles and policies using Python, enforcing least-privilege access.
- Implemented GitLab CI/CD strategies such as Blue-Green deployments and Canary releases, enabling seamless and low-risk rollouts of real-time application updates.
- Utilized GitLab CI/CD runners to ensure efficient code integration, while deployments on AWS platforms such as EC2 instances and Lambda functions.
- Implemented IAM policies and roles to manage access control and security permissions across AWS services, ensuring compliance with industry standards and best practices.
- Implemented CI/CD pipelines using Jenkins automating software delivery processes and enabling rapid deployment of application updates with minimal downtime.

- Responsible for the continuous delivery process to build, deploy, and promote Amazon Cloud applications.
- Set up Bash-based health monitors and alerting scripts for EC2 and RDS using AWS CLI.
- Wrote Bash scripts to sync large directories to S3 buckets, including versioning and lifecycle rules setup.
- Build, manage and continuously improved the build infrastructure for software development engineering teams including implementation of build scripts, continuous integration infrastructure and deployment.
- Migrating on premise applications and resources to multi cloud infrastructure using IAC terraform.
- Automated provisioning of core infrastructure components such as VPCs, subnets, EC2 instances, RDS, IAM roles, S3 buckets, and security groups.
- Implemented IAM policies and roles to manage access control and security permissions across AWS services, ensuring compliance with industry standards and best practices.
- Utilised shell scripting for automating routine tasks, system monitoring, and maintenance, enhancing operational efficiency.

Aricent, Bengaluru, India

February 2013 - June 2017

Automation Engineer

- Developed robust automation scripts in Shell and Perl to streamline system maintenance, application deployment, and log processing across Linux-based environments.
- Automated repetitive operational tasks, such as backups, monitoring, and user provisioning, resulting in a 30% reduction in manual workload.
- Responsible for Installation, Configuration Management, Maintenance Systems Development of Linux Systems.
- Wrote Perl-based tools for parsing complex log files and generating real-time alerts for infrastructure anomalies.
- Collaborated with DevOps and QA teams to create automation pipelines for end-to-end testing, environment provisioning, and post-deployment validation.
- Maintained legacy Perl automation scripts, refactoring and optimising them for performance, readability, and maintainability.
- Used Shell scripts for system health checks, network diagnostics, and automated service restarts across distributed environments.
- Implemented monitoring integrations using Perl scripts enabling proactive issue detection.
- Trained junior engineers in writing efficient Shell and Perl scripts, enforcing internal scripting standards and practices.
- Participated in system hardening and compliance checks through automated Bash/Perl-based audits and reports.
- Participate in incident response activities, security incident investigations and post-mortem analysis to improve incident handling processes.
- Performing initial cycle of manual testing for the software/application based on the Test plans.
- Passionate about AWS Cloud services and moving an organisation to the cloud environment.