Ayush Tiwari

DevOps Engineer | Kubernetes | Cloud Solutions Architect

Email: dbcelm@gmail.com
Phone: 962-740-3300

GitHub: @dbcelm
LinkedIn: @/in/dbcelm
Site: dbcelm.github.io

Professional Experience

ZS Associates, Pune — *Senior Cloud Solutions Engineer*

October 2021 - Present

- Orchestrating Python and Node applications on ECS and EKS,

- Ensuring compute and platform optimization for AI, ML workloads,

- Creating Kubernetes manifests and packaging them as Helm Charts for easy management and distribution,

- Managing Kubernetes deployments on EKS at scale through custom made Terraform modules designed to minimize abstractions and expanding adoption at pace,

- Securing Kubernetes and ECS Fargate workloads by integrating Prisma runtime protection,

- Integrating custom solutions in EKS like custom metrics to achieve event based HPA's, GPU Utilization based HPA's and scale-to-zero NodeGroups,

- Adoption of CNCF projects like CiliumCNI, ArgoCD, Istio, Prometheus to further extend native Kubernetes capabilities,

- Integrating backup solutions from Commvault and Portworx to ensure fault tolerant Stateful applications on containers,

- Writing Terraform modules to automate AWS resource provisionings and managing them on Terraform Cloud in a GitOps manner and through Service Catalog for more generic and simpler use cases,

- Worked with BottleRocketOS to bring upgrade agility to EKS managed nodes

- Designing CI-CD for ECS on Codepipeline leveraging BitBucket source, CodeBuild and CodeDeploy,

- Designing CI-CD for EKS on TeamCity, jFrog/ECR and ArgoCD which ensures full GitOps adoption,

- Setting up alerting and monitoring for containerized workloads on Datadog and log aggregation in Splunk.

Codal Inc., Ahmedabad — *DevOps Engineer*

February 2020 - October 2021

- Designing CI/CD for multi-tenant python django applications, node applications, static angular sites, wordpress and php based sites using AWS CodePipelines, GitHub Actions and Jenkins.

- Orchestrating micro-service based architectures over Docker Compose and Kubernetes.

- Actively optimizing Docker and Kubernetes clusters to adopt security best practices and managing them on AWS ECS, AWS EKS, ensuring scalability, robust availability and continuous deployments.

- Designing CloudFormation and Terraform templates to automate infrastructure deployment.

- Orchestrating Serverless applications over API Gateway and Lambda with SAM

Skills

- **AWS**:

• *CodePipeline / CodeBuild / CodeDeploy*

• *ECS / EKS / EC2 / BeanStalk*

• *IAM / S3 / CloudWatch / CloudTrail*

• *RDS (MySQL and PostgreSQL)*

• *CloudFront / Route53 / VPC*

• *CloudFormation*

• *SES / SNS / Elasticache (Redis)*

• *API Gateway / Lambda / SAM*

• *Secret Manager / Cognito*

- **Cloud Platforms**:

• *AWS / GCP*

- **Containers**:

• *Kubernetes / Docker*

- **CI / CD**:

• *AWS CodePipeline*

• *GitHub Actions*

• *Jenkins*

• *TeamCity*

• *ArgoCD*

- **Scripting**:

• *Bash / YAML / JSON*

- **Operating Systems:**

• *Amazon Linux / Ubuntu / CentOS / BottleRocketOS*

templates.

- Defining reverse proxy configurations in NGINX and Apache

- Reducing latency between services, latency for end-users and to optimize billing costs over AWS and GCP.

- Setting up alerts on Slack and email for deployment success / failure, application availability, service availability, code best practice issues, branch merge to name a few.

- Designing architectures, managing and integrating every AWS service.

Cognizant, Chennai — *Programmer Analyst / Team Lead*

July 2016 - November 2019

- Introducing and adopting cloud services in client's MES domain which was long due for upgrade and was running predominantly on legacy physical and VM server architecture.

- Migrating on-premise Citrix hosted applications to AWS EC2 server fleet and making them scalable.

- Implementing Blue-Green deployment strategy across critical workflows to ensure no application / service downtime while updates are pushed.

- Preparing log streams in Cloudwatch for backend services and applying metric filters to catch errors and trigger alarms.

- Visualize web server access data over Kibana and setting up a data pipeline using ELK stack.

Certifications

Certified Kubernetes Application Developer (CKAD)
Issued: August'23

AWS System Solutions Architect – Associate
Issued: April'18

AWS Cloud Practitioner
Issued: November'17

Docker Certified Associate
Issued: February'19

Education

**SRM University – B.Tech.
CGPA: 8.96 /** *Batch 2012-16*

HSC – 9.6 GPA
2010

SSC – 84.6%
2012