

AWS+DevSecOps

Hands-On

100+ Hours Job Ready Program



A career-launching, project-based training program designed for real-world skills.



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102, Sri Ikon Residency, Near Miyapur Metro, Mathrusree Nagar, Hyd, TG

Why Choose This Program?

Class start with
Interview Questions

More Practical,
Less Theory

24x7 AI enabled
Course Assistance

150+ AI Integrated
Real World Tasks

Certification Exam
Simulator

2 -Years Access to
Recordings

5 Enterprise Grade
Capstone Projects

Resume Building +
Mock Interviews

Daily Support +
24x7 Slack Support



Meet Your Trainer – Avinash Reddy Thipparthi

Avinash Reddy Thipparthi is a passionate DevOps and Cloud expert with 14 years of experience in the IT industry and over 9 years of teaching and mentoring professionals and students. With a strong foundation in real-time projects and hands-on training, he has helped thousands of learners build successful careers in cloud computing and DevOps.

He is a **recognized AWS Community Builder** for the last three years and an official **Docker Captain**, earning global recognition for his contributions to the cloud and DevOps communities.

Avinash has impacted over 50,000 learners through various platforms including YouTube, Udemy, UrbanPro, classroom sessions, and dedicated online training programs. His YouTube channel, followed by 51,000+ subscribers, is widely appreciated for breaking down complex topics into simple, practical lessons making cloud and DevOps learning more accessible for everyone.

HE HOLDS A WIDE RANGE OF INDUSTRY CERTIFICATIONS:

✓ 8 AWS Certifications

✓ 2 X Azure | GCP | RHEL

Join Avinash and start your journey toward a successful career in DevOps and cloud computing with the right mentorship and hands-on experience.

“My goal is to make learning cloud and DevOps simple, practical, and career-focused. Whether you're starting fresh or making a switch, I'm here to guide you every step of the way.”

—Avinash Reddy Thipparthi





AWS Course Content

INTRODUCTION TO CLOUD COMPUTING

INTRODUCTION TO AWS

AWS Global infrastructure
AWS Account creation
MFA Configuration for root user
Free tier limitations overview

COST MONITORING AND ALERTING

AWS Budgets
AWS Cost Explorer
AWS Simple Monthly calculator



IDENTITY ACCESS MANAGEMENT

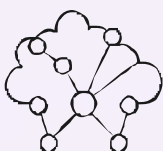
Root Account Vs IAM user
Multi Factor Authentication for Users
IAM Password Policies
Creating Customer Managed Policies.
Policy generator
IAM Policy Simulator
Auditing User Activity

INTRODUCTION TO AI FOR DEVOPS

Amazon Q CLI configuration
Copilot for Devops

INTRODUCTION TO IaC TOOLS

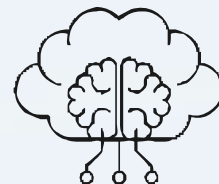
what is cloudformation
Understanding CFT components
Create resources using CFT



LINUX COURSE

What is Linux OS
Linux directory structure
Linux basic commands
File and Directory Management
Data manipulation commands
Understanding VIM Editor
Packaging Management with YUM and DNF

Apache and nginx install & Configuration
Process Management
User Management
Permissions Management
Volume Management with EBS
Extending existing EBS Volumes



COMPUTE

EC2 Instance Launch Wizard with Windows and Linux OS
EC2 Instance Types and Classes
Security groups
Amazon EBS Volumes and Snapshots
Amazon Data lifecycle manager (DLM)
Creating customized Amazon Machine Images
User Data and Metadata
Creating Alarm for EC2 instance.
CloudWatch Dashboard creation
Amazon Eventbridge
Elastic File System
Placement Groups
AWS CLI and IAM Roles
Custom EC2 Metrics with CW



Load Balancing and Auto Scaling

Horizontal Scaling
Vertical Scaling
understanding Load Balancing
Application Load Balancer
Network Load Balancer
Target Groups and Listeners

Auto Scaling Group / ASG

Understanding ASG
Manual Scaling
Step Scaling
Target Tracking Scaling
Schedule Scaling

AWS Systems Manager

Run Command

Session Manager

Resource Naming Standards in AWS

AWS Secrets Manager



Route 53

Introduction to DNS

DNS Records overview

Routing Policies

Hosting Website with Policies.

Simple RP

Weighted RP

Failover RP

Geo Location RP

Failover RP

STORAGE

What is Simple Storage Service (S3)

Storage Classes

Versioning

Cross-region replication

Same Region replication

Life Cycle Management

Security & Encryption

KMS (Key Management Service)

Static Web Hosting with S3 bucket

Events configuration on S3 buckets

Enabling cross account access for S3

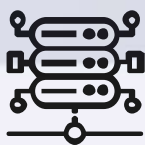
S3 Data management and backup

using 3rd Party applications.

Pre-Signed URLs

Storage Gateway

Direct Connect and AWS Snowball



VPC (Virtual Private Cloud)

Understanding IP concept

Networking Basics

Creating custom VPCs & Subnets

Network ACL's

Route Tables & IGW

VPC Peering

Flowlog creation to S3 and CW Logs Group

VPC Endpoints

AWS Transit gateway

Site-to-Site VPN Configuration

Databases

Launching a RDS DB Instances

Multi AZ Cluster/Instance

Read Replicas for RDS

DynamoDB

Redshift and ElastiCache overview



AWS AI Tools

Understanding Generative AI

Understanding Agentic AI

Configuring MCP Server

Amazon Bedrock

Amazon Q Configuration

Amazon Sagemaker overview

Security Services:

CloudTrail

AWS Config

Key Management Services

AWS Certificate Manager

AWS Trusted Advisor

Content Delivery Networks / CloudFront

AWS Shield and WAF

AWS Multi Account Management

AWS Organizations

Amazon Single Sign-On



Application Services

Simple Notification Service

Lambda



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Migration Services

DMS - Database Migration Service

Introduction to DevOps

Introduction to SDLC

Waterfall Model

Advantages of Waterfall Model

Dis-Advantages of Waterfall Model

Agile Methodology

DevOps History

DevOps Lifecycle



DevOps Services:

What is DevOps in Cloud

Code Pipeline

Code Build

Code Commit

Code Deploy

Introduction to Terraform

Getting Started with Terraform

Terraform Settings & Version Management

Providers Overview

Provider Configuration

Lock and Upgrade Provider Versions

Terraform State Purpose & Basics

Core Terraform Workflow

terraform init

terraform validate

terraform plan

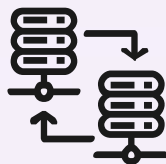
terraform apply

terraform destroy

terraform fmt

Using Modules

Input Variables & Output Values



State Management Basics

Managing Resource Drift

Debugging Terraform

Creating resources using terraform

Resources & Data Sources

Resource Dependencies

Github:

Introduction to github

Basic Git Commands

Git status, add, commit, push

pull, clone, branch, merge

Git Webhooks

Integrating Git with AWS



Introduction to Docker

Introduction to Containers

Network modes in Docker

Writing Dockerfile

Multi Stage Dockerfile

Building Custom Images

Volume Management in Docker

DockerHub

Push images to Dockerhub

Resource Limits on Containers

Introduction to Docker Compose

Running services with compose



Elastic Container Registry

Create a Repo in ECR

Push image to ECR

Push image to DockerHUB

Understanding **Docker Scout**

Fixing Vulnerabilities on Images

Integrating **Trivy** for Security Scans



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AWS Container Services (ECS)

What is Elastic Container Service

Understanding ECS Task

Understanding ECS service

Integrating with Load Balancer & ASG

Automating ECS deployments with

CI/CD pipeline

AWS Elastic Kubernetes Service (EKS)

What is Kubernetes?

understanding K8s Architecture

Node vs Pod Vs ReplicaSet

Understanding Services in K8s

ClusterIP Vs NodePort Vs Load Balancer

Creating and Managing EKS cluster

Configure **KUBECTL-AI**

Vertical Pod AutoScaler

Horizontal Pod Autoscaler

Cluster AutoScaler

Using Goldilocks for resources analysis

Understanding **HELM**

Preparing HELM chart for project

Ingress Controller /

Application Load Balancer Controller

Understanding IAM Authentication and RBAC

EKS ControlPlane Logging

Integrating IBM Kubecost for Cost Analysis

Understanding **Prometheus & Grafana**

Integrating with AWS Services i.e; ELB, CW

Creating AWS EKS Auto Mode

Creating EKS Fargate

Deploying project on EKS

Introduction to **SonarQube**

Integrating Security to Code Quality

Introduction to Artifactory Management

Install and Configure **Nexus**



Maven

What is Maven

Understanding maven lifecycle

Preparing war/jar files using maven

Gradle

What is Gradle

Understanding Gradle lifecycle

Preparing war/jar files using Gradle



Introduction to Github Actions

Variables in GH Actions

Configuring Runners

AWS config using GHA

Runners in GH Actions

Accessing AWS using GHA

Deploy code to EC2 using GHA

Push Image to ECR using GHA

Perform CICD to ECS/EKS using GHA

Understanding **GitOps**

Installing **ArgoCD**

Integrating Argo with EKS

Integrate with ArgoCD for EKS with GHA

- Capstone projects on Server Based Architecture
- Capstone projects on Serverless Services
- Capstone projects on Micro-Service based architecture



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ADDITIONAL BENEFITS

and Learning Opportunities



Capstone Projects Showcasing
End-to-end Aws Services.

Discussions on Quiz and
Scenario Based Questions.



Key Resume Tips and an
Overview of AWS Certifications.

Discussing Interview and
Certification Exam Questions
Alongside Topic discussions.



Offering complimentary Ansible,
Shell, Jenkins courses to all
registered participants.



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THIS ISN'T THE END OF A BROCHURE, It's the start of your breakthrough.

To all my students, When you choose to learn with me, you're not just signing up for a course — you're beginning a career-changing journey. My commitment to you goes beyond sessions and slides. I'm here to support your growth, clear your doubts, guide your decisions, and celebrate your wins.

Whether you're a beginner stepping into IT or a working professional making the switch to cloud, you'll never walk this path alone. With every live session, every project, and every challenge — I'll be right there with you.

This is my word to you : I will teach you with clarity, mentor you with sincerity, and back you with everything I know. Your success is my mission. Let's not just learn DevOps and AWS — let's build a future you can be proud of.

-Avinash Reddy Thipparthi

