Suchan Madhikarmi

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DevOps & Cloud Engineer (AWS SAA Certified) with hands-on experience in automation, cloud-native deployments, and Infrastructure as Code. Skilled in building secure CI/CD pipelines with Docker, Kubernetes, Jenkins, Terraform, Github Actions and Ansible.

Strong foundation in cybersecurity (ISC2 CC, Google Cybersecurity certified) with practical exposure in SOC monitoring, vulnerability scanning, honeypots, and DevSecOps practices (Trivy, Gitleaks, SonarQube).

Exploring AIOps, Generative AI, and LLMs to enhance intelligent automation in DevOps and Security.

SKILLS & TOOLS

Devops & Cloud: AWS, Docker, Kubernetes, Terraform, Ansible, Jenkins, GitHub Actions, Helm, Prometheus, Grafana, Linux (Ubuntu, CentOS), Git, Bash Scripting

Cybersecurity: Splunk, Wireshark, Nessus, SOAR Automation, Honeypot Deployment, Incident Response, Network Security, Vulnerability Scanning, Cloud Security

AI & Programming: Python, Prompt Engineering, Ollama, CrewaAI (Agent Creation), Local LLMs, AIOps, AI Automation, LangChain, OpenAI/Hugging Face APIs, JavaScript, HTML/CSS, Java (Basics), C/C++ (Basics), SQL (Basics)

EXPERIENCE

Cloud Apprenticeship Mar 2025 - May 2025
Adex International Lalitpur, Nepal

- Gained hands-on experience configuring secure AWS cloud infrastructure (EC2, S3, IAM, VPC, RDS) following cloud security best practices, including least privilege IAM policies and network segmentation, completing 5+ productionsimulated deployments in teams.
- Built and deployed CI/CD pipelines using GitHub Actions integrated with AWS, automating build, test, and deployment workflows with secrets management using GitHub Secrets.
- Deployed applications with zero-downtime strategies using Elastic Beanstalk, and monitored performance using basic Prometheus/Grafana setups.

PROJECTS

DevSecOps CI/CD Pipeline for a 3-Tier Application ☑

- Developed an automated CI/CD pipeline using Jenkins, Docker, Terraform, and AWS EKS to deploy a scalable 3-tier Node.js application with security and reliability.
- Integrated security tools including SonarQube (SAST), Trivy (container scanning), and Gitleaks (secret detection) to enforce shift-left security practices.
- Provisioned cloud infrastructure with Terraform and configured Kubernetes RBAC, ingress with TLS via cert-manager, plus monitoring with Prometheus, Grafana, and Slack alerts.

Terraform Project: Cloud Infrastructure & State Management with AWS ☑

- Designed and provisioned highly available, scalable AWS infrastructure using Infrastructure as Code (IaC) with Terraform, deploying modular VPC architecture, Bastion Host, Elastic Beanstalk, RDS, RabbitMQ, and Memcached to support production-ready cloud applications
- Implemented remote backend state management using S3 with state locking, improving collaboration, change tracking, and reducing environment drift across teams.
- Refactored Terraform codebase into reusable modules, reducing provisioning time by 60%, minimizing deployment errors in development and staging environments, and improving code maintainability.

- Developed a fully automated CI pipeline on AWS EC2 using Jenkins, Nexus, and SonarQube, integrating code
 quality analysis, artifact management, security scanning, and real-time Slack alerts—reducing manual
 validation by 80%.
- Designed and deployed a CD workflow using Jenkins, Docker, AWS ECR, and ECS to automate Java web app rollouts from staging to production, achieving zero-downtime releases and accelerating deployment frequency by 3×.

Infrastructure & Application Deployment using Ansible 🖸

- Automated end-to-end provisioning of AWS infrastructure and application deployment using Ansible, improving deployment speed by 70%.
- Configured VPC and EC2 instances, and deployed Nginx with modular playbooks and Jinja2 templates to enable consistent, repeatable infrastructure builds.
- Customized course-based configurations to simulate production-grade deployments, increasing system reliability and accelerating task automation speed by 40%.

GitOps-Based CI/CD Pipeline for Java Application Deployment ☑

- Built a GitOps-driven CI/CD pipeline to deploy a Java web app on AWS EKS using Terraform, Docker, Maven, and Helm, reducing manual deployment time by 75% and improving release consistency across environments.
- Automated provisioning of infrastructure and application through GitHub Actions with isolated repositories, increasing credential security and codebase modularity by 60%.
- Integrated SonarCloud for continuous quality checks and implemented a staging-to-production promotion workflow, accelerating deployment cycles by 3×.

EDUCATION

Bachelor of Information Technology

Jan 2022 - Jan 2026

Himalayan Whitehouse International College

- Currently in 3rd Year, Relevant coursework in SAAD, DBMS, Web Design, AI etc.
- Among the top 5% of the batch

CERTIFICATIONS

AWS Certified Solutions Architect – Associate	May 2025
DevOps Beginners to Advanced with Projects by Udemy	Apr 2025
CISCO Networking	Feb 2025
Python for Cybersecurity Professionals	Feb 2025
ISC2 Certified in Cybersecurity (CC)	Feb 2025
Google Cybersecurity	Sep 2024
Defensive Security Operations	Dec 2024
Generative AI Concepts	Aug 2025
Understanding Prompt Engineering	Jun 2025

LANGUAGES

Nepali (Native proficiency) • English (Professional working proficiency) • Hindi (Professional working proficiency)