# Om Prakash Swain

# Summary

Cloud & DevOps Engineer with hands-on experience in AWS, Docker, Kubernetes, Terraform, and CI/CD pipelines. Skilled in deploying and monitoring ML models, automating workflows, and building scalable cloud infrastructure. Passionate about optimizing deployments and ensuring high system reliability.

# Education

NIST University

Nov 2023 – Present

B. Tech in Computer Science and Engineering

- Coursework: Data Structures, Machine Learning, Cloud Computing, Operating Systems, DBMS

Berhampur, Odisha

# Experience

# **Cloud Computing Intern**

May 2025 – Jun 2025

NIST University

Odisha, India

- Designed and managed cloud infrastructure using AWS EC2, S3, IAM for deploying ML and web applications.
- Automated CI/CD pipelines using **GitHub Actions** and **Docker**, reducing deployment time by 40%.
- Implemented monitoring and logging for deployed applications using AWS CloudWatch and dashboards.

## **Projects**

## End-to-End ML Model Deployment with CI/CD (AWS EC2, Docker, GitHub Actions, Flask)

July 2025

- Trained predictive ML model using Scikit-learn and containerized it with Docker.
- Built CI/CD pipeline using **GitHub Actions** to automate testing and deployment on **AWS EC2**.

#### Real-Time Sentiment Analysis API (Python, FastAPI, AWS Lambda, Terraform)

Jan 2025

- Developed REST API for real-time sentiment analysis using **NLP techniques**.
- Deployed serverless API on AWS Lambda with API Gateway and automated infrastructure using Terraform.

## Movie Recommendation System (Python, Flask, Scikit-learn, Docker)

Aug 2024

- Developed a movie recommendation engine using collaborative and content-based filtering with Scikit-learn.
- Built a web app using **Flask** and containerized the application using **Docker** for deployment.

#### Technical Skills

- Cloud & DevOps: AWS (EC2, S3, Lambda, SageMaker, EKS, IAM), Docker, Kubernetes, Jenkins, GitHub Actions, Terraform
- AI/ML: Scikit-learn, TensorFlow, PyTorch, Pandas, NumPy, OpenCV
- Programming & Scripting: Python, Bash, SQL, YAML, JSON
- Data & Monitoring: Power BI, Tableau, Prometheus, Grafana
- Concepts: CI/CD pipelines, Infrastructure as Code (IaC), MLOps, Cloud Security, Version Control (Git)

### Certifications

- AWS Academy Cloud Foundations Amazon Web Services (2024)
- Machine Learning with Python Coursera (2024)

#### Leadership & Extracurricular

Core Member Sep 2024 – Present

NIST Cloud Computing Club

Berhampur, Odisha

Led 5+ cloud workshops and hackathons for 300+ students, mentoring on AWS, Docker, and Kubernetes.

- Coordinated 30+ technical workshops, facilitating sessions with industry experts.