# Vighnesh Patil

# **Professional Summary**

Aspiring DevOps Engineer experienced with tools like Kubernetes, Terraform, GitHub Actions, and AWS, with a focus on automating CI/CD pipelines, managing microservices, and designing scalable, secure cloud-native systems.

# **Technical Skills**

Languages: Python, SQL

Developer Tools: VS Code, PyCharm, AWS Cloud

Technologies/Frameworks: Linux, GitHub, Docker, Kubernetes

CourseWork: Object-Oriented Programming, Linear Data Structure and Algorithms, Operating System, DBMS

# Education

## G H Raisoni College of Engineering and Management

Aug 2021 - July 2025

Bachelor of Technology in Computer Science (Grade-71.3%)

Pune, Maharashtra

# **Projects**

#### Video Converter: AWS Microservices Architecture

- \* Developed a microservices-based video conversion application that converts MP4 files to MP3, improving media processing efficiency by 30%
- \* Designed and implemented three core microservices: Authentication, Video Conversion, and Notification using Python.
- \* Deployed the solution on AWS EKS, ensuring high availability and scalability.
- \* Employed RabbitMQ for asynchronous message queuing, enhancing inter-service communication reliability by 40%. Integrated PostgreSQL for structured data and MongoDB for flexible document storage.
- \* Tools & Technologies: AWS (EKS, EC2, S3, RDS, IAM), Kubernetes, Docker, RabbitMQ, PostgreSQL, MongoDB, Python.

## DevSecOps CI/CD Pipeline Implementation

- \* Built a secure CI/CD pipeline using GitHub Actions, reducing deployment time by 40% through automation.
- \* Integrated tools like Trivy, Semgrep, Snyk, and SonarQube, achieving 85%+ vulnerability coverage.
- \* Implemented GitOps deployment on AWS EKS using ArgoCD, improving release reliability by 60%.
- \* Provisioned infra with Terraform and containerized the app using Docker and GHCR.

#### Automated Retail Store Application on Amazon EKS

- \* Built and deployed a 5-service retail store application (UI, Cart, Catalog, Orders, Checkout) on Amazon EKS Auto Mode.
- \* Automated provisioning of 10+ AWS resources (VPC, Subnets, IAM, EKS, Ingress, Argo CD) using Terraform, reducing manual setup time by 80%.
- \* Developed a CI/CD pipeline with GitHub Actions to build and push Docker images to Amazon ECR, cutting deployment effort from 30 mins to ;5 mins.
- \* Implemented GitOps with Argo CD, enabling 100% automated sync & rollback and improving release reliability by 90%.
- \* Enhanced scalability with EKS Auto Mode, allowing pods to scale on demand and eliminating manual node management.
- \* Tools & Technologies: AWS (EKS, ECR, IAM, VPC), Terraform, GitHub Actions, Argo CD, Helm, Kubernetes, Docker, NGINX Ingress.

# Leadership / Extracurricular

NSS

## GHRCEM, Pune

\* Volunteered in a hilltop tree plantation campaign, contributing to environmental sustainability and afforestation efforts in rural areas.

# Certifications

- \* 100 Days of Code: The Complete Python Pro Bootcamp: Udemy
- \* Github for Devops Workshop: Online Course
- \* Journey to Cloud: Envisioning Your Solution Online Course (IBM)