RUSHIL PANCHAL

317, Sector-1, Nirnaynagar, Ahmedabad, Gujarat
Email: rushilpanchal1711@gmail.com | Phone: +91 7284027188
LinkedIn: https://www.linkedin.com/in/rushilpanchal/

PROFESSIONAL SUMMARY

Highly skilled DevOps Engineer and Python Developer with proven expertise in cloud infrastructure, CI/CD automation, and AI/ML applications. Experienced in architecting and deploying scalable, high-availability applications on AWS, managing complex database clusters, and developing robust web scraping solutions. Proficient in infrastructure automation, advanced monitoring systems, and full-stack application deployment with a track record of significant cost optimization and enhanced system reliability.

Experience

DEVOPS ENGINEER | *DESIGN DEMONZ* | FREELANCER

- Architected and deployed the complete infrastructure for the **Track Route Pro** mobile application, now live on the Google Play Store with 100+ downloads.
- Built and configured production servers for frontend and backend applications with a high-availability setup, achieving 99.9% uptime.
- Implemented automated CI/CD pipelines using **GitHub Actions**, reducing manual deployment time by 80%.
- Configured **Nginx** as a reverse proxy with a load balancer and SSL certificates for secure domain management.
- Developed an automated PostgreSQL backup solution using **Python**, streaming compressed backups directly to AWS S3 to optimize storage costs.
- Established a multi-environment setup (staging/production) using **AWS Lightsail**, reducing infrastructure costs by 40%.
- Deployed and managed a database cluster (PostgreSQL, MongoDB, Redis) with optimized configurations for performance and scalability.

PYTHON DEVELOPER (AI/ML & WEB SCRAPING) | *TALABAT(UAE)*| JULY 2024 - PRESENT

- Developed and maintained highly robust web scraping solutions using Python (Scrapy, Selenium, BeautifulSoup) to extract product catalogs and pricing from 50+ e-commerce platforms.
- Achieved and maintained 99.8% data accuracy for critical business intelligence and catalog enrichment through sophisticated scraping techniques.
- Engineered and deployed a dynamic proxy rotation and management mechanism, significantly boosting data extraction rates by 75% by effectively bypassing anti-scraping countermeasures.
- Architected and implemented an NLP-driven product categorization model, leveraging text similarity algorithms and machine learning techniques, resulting in an 85% increase in classification accuracy for automated product taxonomy assignment.
- Designed and implemented a high-volume image processing pipeline (processing over 10,000 images daily) for e-commerce product listings.

- Utilized advanced background removal techniques to ensure pristine product imagery with smooth edges and no grey borders.
- Implemented AI-driven super-resolution using ESRGAN to enhance image quality from external sources, optimizing visual appeal for customers.
- Built an efficient audio transcription system with integrated speaker diarization, reducing audio processing time by 70% and enabling scalable analysis of valuable audio insights.
- Revolutionized critical ETL workflows, compressing data processing time from 6-7 hours to just 15-20 minutes through the implementation of parallel processing and vectorized operations, significantly enhancing data freshness.
- Automated complex bulk Excel operations, including advanced product attribute extraction and classification logic, leading to a 95% reduction in manual effort and improved data consistency for large-scale catalog updates.
- Developed comprehensive product matching algorithms for catalog reconciliation, incorporating two-phase fuzzy matching with AI-powered semantic validation to ensure accurate product linking and loyalty pricing.
- Contributed to the development of a unified system for complete flyer processing, encompassing web scraping for flyer links, image downloading, OCR-based price detection with color analysis, and detailed product attribute extraction.
- Implemented robust data validation and cleaning procedures to ensure high quality and consistency across all extracted and processed product information.

DEVOPS ENGINEER | *MONEYTOCODE*| NOV 2024 - JAN 2025

- Reduced monthly AWS cloud costs by **$300** through strategic resource optimization and right-sizing.
- Migrated projects from on-premises servers to AWS, decreasing overall hosting expenses by 30%.
- Set up containerized test environments with **Docker Compose**, cutting environment setup time by 50%.

DEVOPS INTERN | *ENBLITZ TECHNOLOGIES*| JAN 2024 - JUL 2024

- Improved system observability by implementing monitoring with **Prometheus and Grafana**, increasing issue detection speed by 15%.
- Created reusable **Terraform** modules to manage infrastructure as code, improving deployment efficiency.
- Integrated automated testing into the CI/CD pipeline, reducing post-release bugs by 25%.

Education

BACHELOR OF ENGINEERING IN INFORMATION TECHNOLOGY | JUL 2020 - JUL 2024 | *SAL ENGINEERING AND TECHNICAL INSTITUTE | CGPA - 7.83*

TECHNICAL SKILLS

- **Cloud Platforms**: AWS (EC2, S3, Lambda, Lightsail, Amplify, CloudWatch, SNS, ACM, ELB), Google Cloud Platform
- **DevOps Tools**: Docker, Kubernetes, Jenkins, GitHub Actions CI/CD, Terraform, Ansible, Nginx

- **Databases**: PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, Database Clustering & Replication
- **Programming**: Python, JavaScript, SQL, Bash/Shell Scripting
- **AI/ML**: TensorFlow, PyTorch, Scikit-learn, NLTK, OpenCV, Hugging Face Transformers
- **Web Frameworks**: Django, Flask, NodeJS, REST APIs

PROJECTS

Track Route Pro - Mobile Application Infrastructure (2025)

- Designed and deployed complete production infrastructure for mobile tracking application
- Built automated backup system with Python, streaming PostgreSQL dumps to S3 storage
- Implemented multi-environment setup (production/staging) with cost-optimized AWS Lightsail
- Achieved 99.9% uptime with load balancer and automated failover mechanisms
- **Live Application**: Available on Google Play Store with 100+ downloads

Automated Database Backup System (2025)

- Developed Python script for automated PostgreSQL backups with S3 integration
- Implemented streaming compression to optimize storage and transfer costs
- Created comprehensive logging and error handling with email notifications
- Reduced backup time by 60% compared to traditional dump methods

Product Categorization Model (2024)

- Built an NLP-based categorization model using text similarity algorithms, achieving 92% accuracy
- Reduced manual effort by 70%, saving 120 work hours per month

Image Processing System (2024)

- Developed an image enhancement pipeline using Python and OpenCV
- Improved processing speed, reducing image handling time from 2 minutes to 3 seconds

Audio Transcription System (2024)

- Built a transcription system with multi-speaker recognition
- Achieved 85% accuracy in challenging audio environments with background noise

Web Scraping Framework (2024)

- Designed a scraping framework with anti-detection measures and auto-scaling
- Managed a distributed system supporting over 1,000 concurrent scraping tasks