

Suchindu Malith Pallewela

DevOps Engineer | Cloud & Infrastructure | Linux Systems

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SUMMARY

Enthusiastic and dedicated graduate specializing in Data Science, with a strong focus on MLOps Engineering and AI-driven systems. Experienced in deploying AI/ML pipelines, RAG systems, and containerized microservices within real-world production environments, bridging machine learning development with scalable DevOps practices. Skilled in modern cloud-native technologies, with strengthened expertise through a WSO2-certified DevOps Engineering program covering Terraform, Ansible, CI/CD, and Zero Trust architecture. Currently pursuing the Google Associate Cloud Engineer certification, with a strong passion for automation, scalable infrastructure, and intelligent production-ready solutions.

TECHNICAL SKILLS

Cloud Platforms: AWS (EC2, VPC, Security Groups, IAM, Load Balancer), Azure (Foundational)

Containerization & Orchestration: Docker, Kubernetes (K3s), Helm, Argo Rollouts, ArgoCD (GitOps)

Infrastructure as Code: Terraform, Pulumi (Introductory), Ansible

CI/CD & DevOps Tools: GitHub Actions, Git, Docker Hub, Trivy (Image Scanning), ArgoCD, Linux (Ubuntu), Bash scripting, Nginx

Service Mesh & Networking: Linkerd (mTLS, Zero Trust), NGINX Ingress, VPC, Security Groups

Monitoring & Logging: Prometheus, Grafana, Fluent Bit, OpenSearch (ELK)

Secrets & Security: HashiCorp Vault, Kubernetes RBAC, Network Policies, JWT, Zero Trust Architecture

Languages & Scripting: Python (FastAPI), Bash, SQL, JavaScript

Concepts: Zero Trust Security, GitOps, Canary/Blue-Green Deployments, Microservices, Identity and Access Management, Log Management, Configuration Management, eBPF, Service Mesh, Business Continuity

WORK EXPERIENCE

Software Engineering Intern (AI/ML)

Oct 2025 – Apr 2026

GreenBless (Pvt) Ltd

Colombo, Sri Lanka

- **UK Invoice Extraction System:** Improved an AI-powered document processing system by enhancing validation workflows, centralized logging, and multi-client document handling, increasing processing reliability and operational efficiency.
- **US RAG-Based AI Retrieval System:** Supported the development of a scalable AI retrieval platform by contributing to embedding workflows, vector database management, and MLOps-related data pipeline improvements for better search performance and maintainability.
- **Technologies:** Python (FastAPI), React, MongoDB, Qdrant, OpenAI APIs, Tesseract OCR, Docker, CLIP Embeddings, custom workflow and logging systems.

PROJECTS

Cloud-Native Library Management System | [View on GitHub](#)

Mar 2026

Tech Stack: K3s, Terraform, Ansible, ArgoCD, GitHub Actions, Linkerd, AWS

- Provisioned production AWS infrastructure with Terraform (VPC, Security Groups, EC2, Load Balancer) and automated K3s cluster setup Ansible; deployed 6 ASP.NET Core microservices each with isolated PostgreSQL databases and Redis caching.
- Built a full GitOps CI/CD pipeline: GitHub Actions for build, unit test, and Trivy container security scanning; ArgoCD with Argo Rollouts for canary and blue-green progressive deployments with automated rollback on failure.
- Enforced Zero Trust security end-to-end — Linkerd mTLS service mesh, Kubernetes RBAC with default-deny NetworkPolicies, HashiCorp Vault for dynamic secrets, and NGINX Ingress with TLS termination and rate limiting; deployed Prometheus, Grafana, Fluent Bit, OpenSearch, and Alertmanager for full-stack observability.

Dual-Source RAG Classroom Support System | [View on GitHub](#)

Aug 2025

Tech Stack: Docker, FastAPI, Python, Qdrant, Ollama, Faster Whisper

- Architected and deployed a multi-service AI system integrating Ollama, Qdrant, Faster Whisper, and FastAPI with production-ready orchestration, dependency management, and reliability-focused deployment practices.
- Designed a scalable layered architecture emphasizing deployment readiness, efficient resource utilization, and stable AI service operations for production-grade environments.
- Optimized AI retrieval and inference workflows to achieve low-latency responses, improved system stability, and reliable performance under resource-constrained conditions.

Data Warehousing Pipeline | [View on GitHub](#)

Feb 2025

Tech Stack: SSIS, SQL Server, Snowflake Schema, SSAS, Power BI, ETL, OLAP

- Designed and implemented end-to-end data integration pipelines using SSIS for ETL, Snowflake schema-based data warehousing on SQL Server, and OLAP cube deployment via SSAS, with interactive Power BI and SSRS reporting dashboards.

Alzheimer's MRI Classification System | [View on GitHub](#)

Dec 2024

Tech Stack: Python, Flask, TensorFlow, Docker, REST API

- Built a TensorFlow and Flask-based deep learning system with REST API integration for real-time MRI image classification, deployed as a containerized web service.

EDUCATION

Sri Lanka Institute of Information Technology (SLIIT)

Malabe, Sri Lanka

BSc (Hons) in Information Technology Specialized in Data Science

2022 – Present

St. Thomas' College

Matara, Sri Lanka

G.C.E Advanced Level – Physical Science Stream (Combined Mathematics: A Physics: C Chemistry: C)

CERTIFICATIONS

Linux Systems Administration and DevOps Engineering – WS02 | Issued Mar 2026 | [Show Credential](#)

Topics: Linux Administration, Networking, Docker, QEMU Virtualization, Kubernetes, Terraform, Pulumi, Ansible, OpenSearch Log Management, Zero Trust Architecture, Identity and Access Management, eBPF, Service Mesh, Platform Engineering, IT Law, Business Continuity and Disaster Recovery

Google Associate Cloud Engineer | In Progress

Enrolled in the Google Associate Cloud Engineer exam preparation path via Google's official Get Certificate Training Program

AWS Academy Cloud Foundations – Amazon Web Services | Issued Oct 2024

LEADERSHIP & ACTIVITIES

IEEE EMBS SLIIT – Assistant Secretary

SliitXtreme 2.0 Program Team | Aureus '24 Finance Team (2024 – 2026)

Developed skills in leadership, event coordination, financial management, teamwork, and multitasking.

SEDS SLIIT – Divisions Manager

Event Chair – Awareness Session '24 (2024 – 2026)

Strengthened project management, cross-functional collaboration, communication, and team leadership skills.

REFERENCES

Mr. Nuwan Chamara

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