

OSADA RAJAPAKSHA

Kelaniya, Sri Lanka

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Passionate and curious undergraduate with a strong interest in Cloud Computing, DevOps, and Software Development. Comfortable working in collaborative environments, learning new technologies, and taking criticism while continuously improving both technical and professional skills. Currently seeking an internship opportunity to enhance technical skills and contribute to meaningful projects.

TECHNICAL SKILLS

Frontend: HTML, CSS, TypeScript, JavaScript, React, Redux, Tailwind CSS

Backend: Java, Spring Boot Framework, PHP, Python, C, C#, .NET

Database: MySQL, PostgreSQL, MongoDB, DynamoDB

DevOps & Cloud: Jenkins, Terraform, Docker, Kubernetes, Linux, Bash, GitHub Actions, CI/CD, YAML, Prometheus, Grafana, Azure, AWS

AI & ML: Scikit-learn, Pandas, Matplotlib, Seaborn, Imbalanced-learn (SMOTE)

Project Management: Jira, ClickUp

PROJECTS

University Attendance Management System -Group Project

[View Repo](#)

React, Asgardeo, Spring Boot, MongoDB, Docker, AWS, Terraform, OpenChoreo

- Built and deployed a GPS based attendance system, now actively used by over hundreds of students and lecturers at the University of Kelaniya.
- Used React to build a device fingerprint system to prevent account sharing and developed RESTful APIs using Spring Boot.
- Applied Git based version control and collaborative software development practices while taking advice from the supervisor.

CKA Exam Simulator

[View Repo](#)

React, Asgardeo, Node, k3d, Bash, AWS, Terraform, OpenChoreo

- Developed a K3d based platform that simulates Certified Kubernetes Administrator (CKA) exam scenarios, now used by a few users.
- Created realistic troubleshooting scenarios across core components like Pods, Networking and Persistent Volumes.

Microservices E-Commerce Platform

[View Repo](#)

React, Spring Boot, Spring Cloud, Kafka, SonarQube, Trivy, Jenkins, Kubernetes, Terraform

- Embedded DevSecOps principles end to end by automating continuous integration, static code analysis, and secure deployments via zero downtime container orchestration.
- Hardened security with OAuth2 and optimized operations utilizing infrastructure as code and a complete observability stack with Prometheus and Grafana.

PATENTS & RESEARCH

Non-Wearable Sleep Monitoring and Analysis System (*Patent pending*)

[Read Specification](#)

- Engineered an under-mattress sleep monitoring device with latent source recovery and continuous identity attribution.
- Designed a Source Recovery Engine using Blind Source Separation and a temporal state machine to ensure accurate identity tracking without swaps.

Safety Intelligence for Sri Lankan Roads: A Multi-Region Approach to Detecting Traffic Accident Hotspots Using Machine Learning

(*Will be published on 9th October 2026 at ICAPS UoK*)

[Read Paper](#)

- Conducted research on predicting road accident hotspots using machine learning and geospatial analysis.
- Developed hyperparameter tuned ML models (Random Forest, XGBoost) integrated with GIS spatial analysis to predict accident hotspots. Proposed a scalable framework for road safety.

EDUCATION

University of Kelaniya

BSc. (Hon's) Electronics & Computer Science

CGPA: 3.62/4.00

Anuradhapura Central College

GCE(A/L) -Physical Science

Z-Score: 1.41

CERTIFICATIONS

[AWS Certified Solutions Architect – Associate \(SAA-C03\)](#)

[100 Days of Cloud \(Azure\)](#)

[Linux Essentials Certified by Cisco Networking Academy](#)

[Kubernetes Certified \(KCNA\) + Hands on Labs](#)

VOLUNTEERING

Volunteered as a tutor teaching Mathematics and Physics to school students at අප්විඳ්දිම.

Supported university peers by explaining course modules.

[YouTube](#)

REFEREES

Dr. (Ms.) D.M.P.V. Dissanayaka

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Mr. S.T. Sandunwala

Lecturer at University of Kelaniya

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