# Jalitha Kheminda

B.Sc(Hon's) Engineering Undergraduate
University of Ruhuna



## Contact



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https://github.com/Khemz-Developer



https://khemz-developer.github.io/deploy-portfolio/

## Skills

• Programming Skills:

JavaScript, Typescript, Java, Python, C++.

- Cloud Computing : AWS , AZURE
- Full Stack Web Development: MEAN , MERN ,FLASK
- Full Stack Mobile Development : React Native
- Machine learning , Deep Learning
- Federated Learning
- Database Management: MySQL, MongoDB
- Basic Knowledge of Tools and Technologies Used in DevOps:

Containerization: Docker

Orchestration: Kubernetes

(CI/CD): Jenkins , Github Action

Configuration Management: Ansible

## **About Me**

I am a final-year engineering student at the University of Ruhuna, skilled at working under pressure and always looking to improve my abilities. Fluent in English with strong communication skills, I have experience in leadership and teamwork. I am currently focused on studying Software Development Engineering and Cloud, DevOps Engineering. I am eager to learn new things, especially in software development and cloud technologies, so I hope to find internship opportunities in these areas.

# Job Experience

Trainee Software Engineer 2023 - 2024
Sri Lanka Telecom PLC , Headquarters , Colombo

Completed 3 months internship period as Trainee Software Engineer.

# **Projects**

Implementation of a FL poisoning and defense system in an IoT based health prediction network (Ongoing)

Developed a defense system for IoT-based health prediction using Federated Learning. Designing strong algorithms to counter poisoning attacks in non iid data scenarios. Aimed at enhancing privacy in healthcare machine learning.

Technologies: Python, Deep Learning, Federated Learning, Flask

## Games for Stroke Rehabilitation

Developed a project aimed at assisting patients with hand movement impairments. The game utilized the computer's web camera to detect hand movements, which were translated into game controls. This innovative approach aids in hand motion recovery.

Technologies : Unity, Open CV, Machine Learning

#### SLT Job Portal System

Developed a comprehensive job portal website designed to streamline the job search and application process for both job seekers and employers.

Technologies: React Js, Express Js, MongoDB, Node Js, Firebase

#### Food Delivery Web and Mobile App

Developed a website and mobile app that enables users to order food online. Customers can browse menus, place orders, and make payments through the platform.

Technologies: Vite, Express Js, MongoDB, Node Js, Firebase Authentication, Stripe payment, React Native, Expo, Superbase

# Certifications

Introduction to Containers w/ Docker, Kubernetes & OpenShift

AWS Fundamentals Specialization

Supervised Machine Learning- Regression and Classification

Advanced Learning Algorithms

Front End Web Development -University of Moratuwa

## References

#### Dr. Thilina Weerasinghe

Senior Lecturer,

Department of Electrical and Information Engineering, Faculty of Engineering,

University of Ruhuna,

Galle.

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#### Mr. Tharindu Gamage

Lecturer

Department of Electrical and Information Engineering, Faculty of Engineering,

University of Ruhuna,

Galle.

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# **Projects**

## Multiple Disease Prediction System

Developed a Multiple Disease Prediction System utilizing machine learning to predict the likelihood of diabetes, cancer, and stroke. Implemented as a web application it provides accessible and accurate health assessments for users.

Technologies: Machine Learning, Streamlit

## Developed a Covid 19 Center Database System

Developed an efficient and robust system to manage and organize critical information concerning COVID-19 patients throughout the pandemic, ensuring effective coordination and streamlined data handling.

Technologies: MySql

## Smart Garbage Monitoring System

Developed and implemented a Smart Garbage Monitoring System using microcontrollers, Ultrasonic sensors and GSM modem. Real-time monitoring of garbage levels, SMS alerts for threshold levels, and efficient waste management achieved.

Technologies and Tools : Microcontrollers, GSM modem , Atmel , Sensors

## Smart Car Parking System

Developed an IoT-based parking management system that utilizes sensors and cloud connectivity to efficiently manage parking spaces in congested cities. The system detects slot occupancy and gate openings, allowing users to check availability online.

Technologies and Tools: Microcontrollers, IOT Platforms, Sensors

# **Publications**

Poster presentation on 'A NOVEL GAME PLATFORM FOR IMPROVEMENT OF HAND FUNCTIONS IN STROKE REHABILITATION'
Association of Sri Lankan Neurologists Annual Congress (ASNAC – 2024)
DOI: https://doi.org/10.4038/sljon.v11i5.168