# KASUNI HANSACHAPA

## Computer Engineering Undergraduate

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🏠 Mirigama, Sri Lanka

in kasuni-hansachapa

## TECHNICAL SKILLS

**Programming Languages**
Python, C, Java, PHP, JavaScript, ARM assembly, Dart

**Frameworks and Libraries**
React, Spring, NodeJS, Pandas, Numpy, Matplotlib,Scikit-learn, TensorFlow, JUnit

**Mobile Development**
React Native, Flutter

**Databases**
MongoDB, MySQL

**Cloud**
AWS EC2,AWS RDs

**Other**
Git, Verilog HDL, Matlab, Docker

## SOFT SKILLS

- Teamwork
- Communication
- Problem Solving
- Time Management
- Project Management
- Adaptability

## LANGUAGES

- Sinhala
- English

## ABOUT ME

As a Computer Engineering student, I'm passionate about technology and solving problems. I'm eager to apply my skills in software engineering and machine learning through an internship, committed to learning and making meaningful contributions to innovative projects.

## EDUCATION

**University of Peradeniya**
BSc.Eng(Hons) in Computer Engineering
Current GPA : 3.35/4.00

**Rathnavali Balika Vidyalaya,Gampaha**
G.C.E. Advanced Level, 2019
Physical Science Stream

## CERTIFICATES

**Programming for Everybody(Getting Started with Python)**
University of Michigan | Coursera

**Supervised Machine Learning : Regression and Classification**
DeepLearning.AI | Coursera

**Generative AI for Everyone**
DeepLearning.AI | Coursera

**OOPs in Java**
GreatLearning

**AWS For Beginners , Docker for Intermediate Level**
GreatLearning

**React JS Tutorial**
GreatLearning

## VOLUNTEERING

Seminar  Organizer,                              2022 - 2024
Computer Engineering Seminar Series
Project Nenathambara                        2024
Worked As Python and Arduino Tutor for School students
Project Arunalla                                2022 - 2023
Seminar series organized by engineering students' union for O/L students in Rural areas.

# PROJECTS

## Automated Hydroponic System | Group    Nov. 2023- Feb.2024

- An embedded system designed to monitor pH levels, TDS levels, and remaining resources, with data sent to AWS cloud storage. This information is accessible through mobile and web applications, providing users with real-time insights to effectively manage and maintain their hydroponic systems.
- Contributed to create the  mobile application, hardware part and documentation.

**Technologies :** React, Flutter, Mysql, AWS(IoT Core, EC2,RDs), docker, Maven

## Engineering Education Unit  | Group    Aug. 2023- Nov.2023

- A highly secure web application for the Engineering Education Unit (EEU) at the Faculty of Engineering, University of Peradeniya.
- Our primary goals were to enhance security, improve user-friendliness, and facilitate content management with dynamic editing feature
- Contributed to create the UI of the web application

**Technologies :** React, java, Mysql, Spring framework

## Library Management System  | Group    May. 2023- Sep.2023

- A software application automates the operations in managing a library for both staffs and readers
- Contributed to create the web application

**Technologies :** React, Springboot, Mysql

## ML-based Rainfall Prediction System | Group    Nov. 2023- Present

- A predictive model that estimates future rainfall based on historical weather data analysing various meteorological factors such as longitude, latitude,elevation and past rainfall patterns .
- Contributing to  the model development and model evaluation

**Proposed Technologies :** Python, Pandas, Scikit-learn, FastAPI

## 8-BIT Single Cycle Processor  | Group    Aug. 2023

- An ARM architecture-based processor was implemented using the ALU, register file, control unit, data memory, instruction memory, and caches.
- Contributed to build part of the application.

**Technologies :** Verilog HDL, C, ARM Assembly

## Face Detection and Emotion Recognition System    APR. 2024-Present
## Individual

- A mini project designed to process a collection of images, detect faces within those images, and recognize the emotions displayed by these faces using a pre-trained emotion recognition model.

**Proposed Technologies :** Python, OpenCV, TensorFlow, FastAPI

# REFERENCES

PROF.ROSHAN RAGEL
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