



CONTACT ME



+94 70 39 69 096



dasith.20@cse.mrt.ac.lk



github.com/Dasith77



www.linkedin.com/in/dasith-niwanthaka

EDUCATION

**BSc (Hons) in Engineering -
Computer Science & Engineering**
University of Moratuwa
2021-Present

**G.C.E Advanced Level
examination 2019-
Physical Science stream**
R/Eheliyagoda Central College

Passed with 3 A's
Island rank - 11
District rank - 2

RESEARCH INTERESTS

- Computer Vision
- Cloud computing
- Distributed systems

Dasith Niwanthaka

Computer Science and Engineering
Undergraduate

ABOUT ME

I am an enthusiastic individual with a strong passion for full-stack development and computer vision. My curiosity drives me to explore emerging technologies and stay updated with the latest advancements in the field. I am dedicated to continuously expanding my skillset and contributing to innovative projects that harness the power of cutting-edge technologies.

PROJECTS

American sign language detector (Ongoing)

computer vision • html • reactjs • mediapipe • scikit learn • Python • flask

- In our fifth-semester project, we're using machine learning and computer vision to identify hand sign languages and convert them to text and create front end for that using reactjs.
- We use Python and the Mediapipe library to capture hand landmarks for analysis.
- Our goal is to train a RandomForestClassifier on an alphabet dataset to recognize letters conveyed through hand signs and integrate the system into a web interface using Flask for the backend and React for the frontend.

E commerce database management system project

java • css • html • MySQL

- This project aims to create an e-commerce website for item display, cart management, and variation selection.
- It utilizes HTML and CSS for the front end and Java with MySQL for the backend, enabling robust database management.
- Java database connectors are used to ensure seamless communication between the backend and MySQL, ensuring efficient data handling.

Command line based Email Client

java

- I created a Java-based command-line email app using OOP and the Java Mail API for sending emails from the command line.
- The app uses Object Serialization to store sent emails, making retrieval by specific dates easy through Object Deserialization.
- This efficient email tool enhances management and suits various recipients, addressing their roles and positions effectively.

TECHNICAL SKILLS

Programming languages

- Java
- Python
- C++

Web Development

- HTML
- CSS
- JavaScript
- MySQL

Libraries

- OpenCV
- MediaPipe

Designing

- Adobe photoshop
- Canva

REFERENCES

Dr.Sulochana Sooriyaarachchi

Senior Lecturer
Department of Computer Science & Engineering
University of Moratuwa
Sri Lanka
sulochanas@cse.mrt.ac.lk

Dr.Kutilla Gunasekera

Senior Lecturer
Department of Computer Science & Engineering
University of Moratuwa
Sri Lanka
kutilla@cse.mrt.ac.lk

National id card reader

Python• tkinter

- This is a small application designed for Windows computers running Windows 10 or later.
- Its purpose is to retrieve information about a person's birth date, gender, the number of days they've lived, their current age, and to determine whether the National Identity Card (NIC) holder is an elder or a child.
- The application is developed using Python and utilizes the Tkinter Python library for its graphical user interface.

Agri IOT project

Arduino•c++

- I successfully created a prototype project that connects a drone with a soil sensor for communication.
- This setup enables data transfer between these two devices using the zigbee protocol and ESP32-H2 microcontrollers.

ACHIEVEMENTS

• Image Matching Competition - 2023 (Google research)

Participated in the 2023 Image Matching Competition sponsored by Google Research and Haiper able to win island rank 1 and world rank 323. Developed expertise in using Structure from Motion (SfM) techniques to create precise 3D models from different image collections. This competition helped advance spatial imaging technology with potential benefits for Google Maps and other industries

• IEEE SPS Video and Image Processing Cup | World Rank - 14

As a Team named PixelVision, Participated in the Ophthalmic Clinical Trials Data Analysis Challenge, applying advanced image processing techniques to address personalization challenges in 3D optical coherence tomography (OCT) imagery, contributing to improved personalized treatment planning for eye diseases

CERTIFICATES

• Object Oriented Programming Concept-1 (java)

java institute for advanced technology - Colombo

• Web Development with HTML, CSS, JavaScript Essentials

IBM - Coursera

• Introduction to big data

University of California - Coursera

EXTRA CURICULAR

- Team member of Revelation 20.0 organized by Rotaract club, University of Moratuwa.
- Publicity committee member of RiseUp Mora 2022 IEEE, University of Moratuwa.
- Digital photography (won the 3rd place of most popular photo of Rota Click 2021 organized by Rotaract club of University of Moratuwa).