Chanupa Devnith Wijesinghe

Engineering undergraduate

Electronic and Telecommunication Engineering University of Moratuwa

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Summary

I am a first year undergraduate studying Biomedical engineering at University of Moratuwa. I am striving to apply mathematics, machine learning and signal processing skills to provide effective solutions in the healthcare industry.

Research interests: Computer Vision and Pattern Recognition, Digital Signal Processing, Medical Image Processing, Quantum Computing

Education

Faculty of Engineering, University of Moratuwa

Aug. 2022 - present

Bachelor of Science (Hons) in Engineering Specialising in Biomedical Engineering

GPA: 4.0/4.0

Richmond College Galle

Jan. 2012 - Aug. 2020

GCE Advanced Level - Physical science stream - 3A passes with an Z-score of 2.7301 GCE Ordinary Level - 9A's

Professional Experience

Phoenix Cube Satellite Project

Feb. 2023 - present

Member of the onboard-computing sub system

Founding Partner - Hypeworks LK

Jul. 2022 - present

Co-founder of the digital marketing agency Hypeworks LK Graphic designer, Web developer

Projects

Brain tumor detection using Neural Network

Kaggle

A Convolutional Neural Network trained on a brain MRI dataset to detect tumors. https://www.kaggle.com/code/devnithw/brain-tumor-detection-using-neural-network

Classifying blood cells using CNN

Kaggle

A Convolutional Neural Network trained on a dataset of blood cell images to classify them into 8 groups. https://www.kaggle.com/code/devnithw/classifying-blood-cells-using-cnn

Mathematical modelling and machine learning using Julia

Educational

A collection of Julia tutorial notebooks written using Pluto.jl and hosted on Github pages. https://devnithw.github.io/julia-tutorials

Honors and Awards

Spirit of Service Award, Rotaract Mora	May. 2	2023
Dean's list placement (Semester 1), Faculty of Engineering, University of Moratuwa in	Dec. 2	2022
Fri Lanka Chemistry Olympiad Honorable Mention	Jan. 2	2020
Sri Lanka All Island Mathematics Quiz Bronze medal	Jan. 2	2020
Principal's medal for best OL results, Richmond College	2	2018

Volunteering

IEEE EMBS Student Chapter, University of Moratuwa

Executive Committee - Content Creator

Member

Jul. 2023 - present

Jan. 2023 - Jun. 2023

Rotaract Club of University of Moratuwa

Co-director of Membership Development

Co-chair of Premio Foramalita and Euphoria Prom

Co-chair of project Manusath Handa

Aug. 2023 - May. 2023

Inducted Member

Sep. 2022 - May. 2023

Jan. 2023 - present

2021

Mathematics Society, University of Moratuwa

Design team - M-Pirates

Head of Public Relations, RichMUN'21

President of Richmond College Science Society 2019 - 2020

Technical Skills

Languages: Julia, Python, MATLAB, C, C++, Javascript

Markup: HTML, CSS, LATEX, Markdown

Frameworks: Tensorflow, Pytorch, NumPy, Scikit-learn

Software: Unity Engine, Solidworks, Adobe Photoshop, Adobe Premier Pro

Tools/Other: Git, Github