

PASINDU SANKALPA

Undergraduate | Electronic & Telecommunication Engineering

[in linkedin.com/in/pasindu-sankalpa-64979217a](https://www.linkedin.com/in/pasindu-sankalpa-64979217a) github.com/Pasindu-Sankalpa

+94-772083554 @psndsankalpa@gmail.com

No.39, Siddhartha Road, Peellawatta, Andiambalama, Gampaha

psnd-resume.web.app



An enthusiastic electronic undergraduate who loves to solve problems with an engineering approach. Can quickly adapt to new technologies. Use his full potential and skills to make the world a better place.

Areas of interest : Robotics Machine Learning AI Radar

EDUCATION

B.SC. ENG (HONS.) ELECTRONIC & TELECOMMUNICATION ENGINEERING
UNIVERSITY OF MORATUWA

DEC. 2019 – PRESENT
SRI LANKA

- CGPA - 3.83/4.20
- Dean's list in Semester 1 and Semester 2

G.C.E. ADVANCED LEVEL
BANDARANAYAKE COLLEGE - GAMPAHA

2018
SRI LANKA

- 3A's in Physical Science Stream
- Z-core = 2.1941
- Gampaha District Rank 16

MOOCS
COUSERA & UDEMI
➤ Machine Learning Specialization

PROJETS

AQUARIUM AUTOMATION SYSTEM (ONGOING)

2022

Currently working on developing a system for automate the process in commercial aquariums. This includes water quality monitoring and performing needed actions in an anomaly. Automating the fish feeding process. A dashboard will be provided to the owner's mobile phone for monitoring and commanding.

VOLTAGE REGULATOR

2022

Developed a voltage regulator for high power applications. Regulated voltage is 28 volts with a maximum current rating of 30 amperes. An over current protection circuit was also added. In this project, maintaining the ripple ratio at an acceptable level and thermal management played a prominent role.

Altium Solidworks

VIS-BRIDGE

2022

github.com/Pasindu-Sankalpa/project-SPARK

This device can control the electrical equipment based on the hand gestures given by the user. The project was developed based on the Raspberry Pi single board computer. Computer vision algorithms was employed to identify the hand gestures. A power electronic circuit controlled the power delivered to equipment.

Python Image Processing Raspberry Pi Altium Solidworks

AUTONOMOUS ROBOT FOR COMPETITION

2021

github.com/Pasindu-Sankalpa/Robocop

We developed an autonomous mobile robot simulation for UOM's EN2532 - Robot Design and Competition Module & successfully completed the given task. It consisted of maze solving, object detection and placing, etc. Webots simulator was used as the simulation platform.

C C++ AVR Webots

RGB COLOR SENSOR

2021

 github.com/Pasindu-Sankalpa/RGB_Sensing

We developed an RGB color sensor using ATMEGA328P chip. It can identify the any given surface color and give R,G,B values almost precisely. The sensing component is an LDR.

C C++ Arduino AVR Altium

AUTOMATIC WATER LEVEL CONTROLLER FOR WELL

2021

Developed an automatic water level controller for home use. Water level of tank is displayed using an LED panel. Both water level of tank and well is considered before activating the pump.

C C++ Arduino Altium Solidworks

MOBILE CHARGER WITH TIMER

2019

I have developed a simple mobile charger with timer using an arduino nano for my personal use. Currently in operation.

Arduino



ACHIEVEMENTS

Top 10 2022 SPARK Challenge, UNIVERSITY OF MORATUWA

- Our project is Vis-bridge
- Team Voyager-3

Top 50 in LK 2021,2022 IEEE Extreme, IEEE

- Rank 20 in LK IEEEExtreme 16.0
- Rank 49 in LK IEEEExtreme 15.0

Top 10 2015 National Statistics Olympiad Competition, INSTITUTE OF APPLIED STATISTICS - SRI LANKA

- Won a merit pass



EXPERIENCE

Present 2019 Home visiting tutor, ONLINE TUTOR

- Physics & Combined Maths Tutor for AL students
- Maths Tutor for OL students
- Online teaching using ZOOM platform

Present 2019 Member of Electronic Club, UNIVERSITY OF MORATUWA

- We could be able to successfully conduct many events and workshops as a team

Present 2020 Member of IEEE Society, IEEE



SKILLS

Languages Sinhala(native), English

Programming skills C, C++, Python, Matlab, Git

Technical Skills Altium, Arduino, Raspberry Pi, Multisim, Solidworks

Soft Skills Leadership, Teamwork, Time management



REFERENCES

Dr.Ranga Rodrigo

Head of Department

DEPT. OF ELECTRONIC & TELECOMMUNICATION ENGINEERING

University of Moratuwa

@ ranga@uom.lk

+94 11 26 40422

Prof. L.W.P.R.Udayanga

Professor

DEPT. OF ELECTRONIC & TELECOMMUNICATION ENGINEERING

University of Moratuwa

@ ruwanu@uom.lk

+94 77 783 1683