

# Kasun Siriwardhana



Profile



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I am a pending graduate with a background in Electronic and Telecommunication engineering, interested in electronics designs, embedded systems, firmware development, robotics, AI ,automotive electronics, IoT and researching. I possess a strong desire to constantly learn and improve, and thrive in challenging environments. I am a proficient painter capable of creating stunning and captivating artwork and a nature photographer.



## Skills

Programming  
Electronics Design  
Embedded Systems  
Firmware Development  
Mathematics  
Testing and Debugging  
Documentation  
  
Autodesk Eagle  
Solidworks  
Adobe CC  
Figma  
  
Python(Intermediate)  
C/C++(Intermediate)  
Verilog/VHDL(Beginner)

## Honors and Awards

IEEEExtreme programming competition 16.0  
Semi -Finalist - HackX 2022 (InterUniversity Start-up Challenge)  
Semi -Finalist - IEEE Innovation Nation Sri Lanka (INSL) 2022

## Side projects

Off-grid solar installation  
CCTV system Installation

## Publications

DEVELOPMENT OF AN INTELLIGENT OUTDOOR CAMERA SABOTAGE DETECTION MODEL  
Co-Author | 2023  
16th International Research Conference KDU

## Education

BSc (Hons) in Electronic and Telecommunication Engineering  
General Sir John Kotelawala Defence University  
Jan 2020 - Jan 2024

## Experience

### Vega Innovations - Trainee Electronic Engineer

Oct 2022 - Apr 2023

During my tenure at VEGA, I led research on an OTA firmware update project utilizing MQTT and CAN communication protocols for industrial microcontrollers. I also designed a PCB for a home battery pack display driver IC and created a corresponding library.

MQTT, CAN, SPI, UART, FreeRTOS, IoT, TI,ST&ESP32 microcontrollers, PCB design and fabrication

### Research Incharge

Oct 2021 - 2022

KDU : Electronic, Robotics and Innovation Club (ERIC)

I have led research, organized events, and enhanced collaboration within the Electronic, Robotics, and Innovations Club. I have forged partnerships, demonstrated expertise, and mentored members, fostering knowledge sharing.

## Projects

### IMPLEMENTATION OF AN OUTDOOR CAMERA SABOTAGE DETECTION SYSTEM MODEL - Final Year group project

Transfer Learning, Python, RTSP, Firebase, OOP, Vuejs, Jetson Nano  
Mar 2023 - Dec 2023

### COLD BOX FOR VACCINE TRANSPORTATION - individual project

A cost-effective, user friendly temperature controlling cold box to transport vaccines to upgrade the child vaccination programs in Sri Lanka

2021

### IOT GAS LEVEL MONITORING SYSTEM - individual project

HTTP POST Request Method, ESP32, Firebase, Espressif-IDE

This IoT project offers seamless LP gas cylinder monitoring through Wi-Fi connectivity. It ensures secure data storage and real-time notifications in a user-friendly interface,

2023

### DESIGNING AN ANIMAL REPELLANT - group(EDP module)

Orcad, Solidworks

2022

## References

Prof. TL Weerawardane  
Dean Faculty of Engineering,  
General Sir John Kotelawala  
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