



Name • R.G.V.B. Ariyawangsha

Address • 42/2, Randeniya,  
Teldeniya, Kandy, 20900

NIC • 991733191v

DOB • 21<sup>st</sup> June 1999

Tele • +94 76 376 0285

Email • [aryans.viraj@gmail.com](mailto:aryans.viraj@gmail.com)



## TECHNICAL SKILLS

- ✓ Python ● ● ● ● ●
- ✓ C, C++, Octave ● ● ● ● ●
- ✓ Arduino ● ● ● ● ●
- ✓ JS, Html, CSS ● ● ● ● ●
- ✓ Linux (Shell / OS) ● ● ● ● ●
- ✓ PCB Designing ● ● ● ● ●
- ✓ Graphic Designing ● ● ● ● ●
- ✓ Professional Writing ● ● ● ● ●

## NON-TECHNICAL SKILLS

- ✓ Problem Solving
- ✓ Leadership
- ✓ Team Management
- ✓ Communication
- ✓ Digital Marketing
- ✓ Project Management

# VIRAJ ARIYAWANGSHA

## ELECTRICAL AND ELECTRONICS ENGINEERING UNDERGRADUATE

As an ambitious final year engineering undergraduate, I am seeking an internship opportunity in the fields of electronics, embedded systems, and AI where I can get real and hands-on engineering experiences. With a passion for learning and a proven track record of being an innovative problem solver, I am confident in my ability to quickly adapt to new challenges and contribute as a multi-tasking team-player to drive a project to its success. I am eager to work with an organization that promotes innovation and enriching human interactions.

## PROFESSIONAL EXPERIENCE

### Trainee Electronics Engineer • Vega Innovations (Pvt) Ltd.

**August 2023 – October 2023**

Supervised by Eng. Nisal Bulathsinghala (Head of the Department - Automotive Electronics)

Engaged in the Department of Automotive Electronics with an assignment to design and develop a prototype PCB for a 100A 8-channelled, MOSFET driven Power Distribution Module for the newest EV project in Vega. (*[Refer to the training report](#)*)

### Trainee Associate Electronics Engineer • Zone24x7 (Pvt) Ltd.

**May 2022 - July 2022**

Supervised by Dr. Gerard Fernando (Chief Scientific officer, Zone24x7), Mr. Niroshan Karunaratne (Senior Tech Lead, Zone24x7)

Worked in the Electronics and Embedded systems team as an intern engaging in a solo project named *NQoSM*, to develop a python library for Linux kernel tracing and resource monitoring. *[This article](#)* highlights a few key concepts used for the project. (*[Refer to the training report](#)*)

## EDUCATION

### BSc Engineering (2024) | University of Peradeniya

Currently following, Electrical and Electronics Engineering course specializing in Electronics and Signal Processing (GPA: 3.15)

### G.C.E. Advanced Level (2018) | Dharmaraja College, Kandy

4 A's with an z-score of 2.1200 (Index No: 3215083)

### G.C.E. Ordinary Level (2015) | Teldeniya Nation School

9 A's in Bilingual Medium including the subjects ICT, English Literature and Japanese. (Index No: 5463119)

## CERTIFICATIONS

### • VLSI CAD Part II: Layout, University of Illinois at Urbana-Champaign

April 2024. [Credentials](#)

## LANGUAGES

Sinhalese (Native)

English (Highly Proficient)

Tamil (Reading and Writing)

## INTERESTS

Artificial Intelligence

Deep Learning

Robotic Control Systems

Internet of Things

Embedded Systems

FPGA Design

VLSI Design

Computer Networking

Signal processing

Psychology

## PROFESSIONAL AFFILIATIONS

IESL Student Member  
(S-28640)

IEEE Member (Student)  
(99105739)

- **Supervised Machine Learning: Regression and Classification, DeepLearning.AI**  
March 2023. [Credentials](#)
- **Neural Networks and Deep Learning, DeepLearning.AI**  
April 2022.
- **Foundations of User Experience (UX) Design, Google**  
June 2021. [Credentials](#)
- **HTML, CSS, and JavaScript for Web Developers, John Hopkins University.**  
May 2021. [Credentials](#)
- **Python for Everybody Specialization, University of Michigan**  
Nov 2020. [Credentials](#)
- **C programming Gold Badge (5 Star), Hackerrank**  
March 2022
- **Lean Management for Engineers (White Belt Course)**  
February 2021. Key Facilitator: Eng. Kokila Arandara, Lean and Green Solutions (PVT) LTD

## PROJECTS AND RESEARCH

### 2024 • Wired-to-wireless converter dock (Ongoing)

A portable conversion dock to act as a bridge between most common types of wired peripherals and host devices with wireless interfaces such as Bluetooth and Wi-Fi, using an STM32 as the MCU. A solo electronic design and prototype project out of passion.

### 2024 • Computer vision based human action recognition and dyadic interaction detection (Ongoing)

Final year research project in computer vision and deep learning domain to detect and identify two-person interaction using a camera feed in real time.

### 2023 • Design and development of a power distribution module – Vega Innovations

An 8-channelled power distribution module was designed and developed from the electronic circuit level to a working prototype of a PCB. The PDM was using MOSFETs for switching which handled up to a maximum of 100A passing through the board when operating with all channels ON.

*Skills: Electronic Circuit Designing, PCB Designing, High power design*

### 2023 • Gesture controlled wireless virtual mouse

A product development project to control the cursor on a screen wirelessly by hand movements as a virtual mouse. Use ESP32 chip, gyroscope, and accelerometer sensors along with multiple touch sensors. Communication through BLE in a client-server notify architecture.

## **2022 • NQoSM, Python library development for Linux kernel tracing and resource monitoring - Zone24x7**

Network Quality of Service Monitoring (NQoSM) is a project done for Zone24x7 (Pvt) Ltd., to build a python library composed of all the tools required to build applications for Resource Monitoring. The library can be used to write python applications with the ability to manage and monitor resources such as Network, CPU, Disk and Memory in remote Linux running servers. A powerful tool called eBPF was used for Linux kernel tracing and a setup of 3 networked Raspberry Pi boards was used as the testing.

*Skills: Linux, Networking, OOP programming, embedded systems*

## **2022 • Magnetic cargo mover for classification**

An automated embedded system development project to move a metallic object in a 2D space with an electromagnetic grip mechanism. Working model was built for colour code classification with ATmega 328P chip along with multiple sensors programmed using Assembly language.

## **2021 • 2D Range sensor design project for robotic object detection**

A sensory system development project to measure coordinates in a 2D space using Arduino and ML concepts.

## **2021 • Website and online magazine platform development for project Artha-2021**

The project website along with a flip book type magazine platform designed and developed from scratch using HTML, CSS, and JavaScript. Hosted on firebase and GitHub pages.

[Git Repository](#) | [Website \(අඊඊ 2021\)](#) | [Magazine \(අඊඊ online Pages\)](#)

## **2021 • Champion at the Mectrogon ideathon competition**

A smart transport management system with a practical and effective implementation plan proposed by our team "unDefined". Event organized by AIESEC in University of Colombo in August 2021

## **2014 • Second Runners up at the Sri Lankan Stockholm Junior Water Prize**

A research project under the topic "Losing vitality among Hakkinda Islands" for the category of Ecosystems and Biodiversity to study and save a sensitive and diverse biological ecosystem.

# **VOLUNTEERING EXPERIENCE**

---

## **2022 - 2024 • Executive Committee, IEEE Student Branch of University of Peradeniya**

Current Secretary and former webmaster. Founding chair of IEEE Computer Society chapter in University of Peradeniya.

## **2021 - 2023 • Executive Committee, Rotaract Club of University of Peradeniya**

Vice President in the avenues of Public Relations and External relations while serving as the Sergeant at arms handling HR and code of conduct. Former Director of Digital media.

## REFERENCES

**Dr. Roshan Godaliyadda,**  
Professor,

Department of Electrical and  
Electronic Engineering, Faculty of  
Engineering, University of  
Peradeniya, Sri Lanka.

BScEng., PhD., SMIEEE,

Email: [roshangodd@ee.pdn.ac.lk](mailto:roshangodd@ee.pdn.ac.lk)

Tele: +94 81 239 3431

**Dr. Ruwan Ranaweera**

Senior Lecturer,

Department of Electrical and  
Electronic Engineering, Faculty  
of Engineering, University of  
Peradeniya, Sri Lanka.

Email: [ruwan@eng.pdn.ac.lk](mailto:ruwan@eng.pdn.ac.lk)

Tele: +94 77 775 0235

**2021 - 2023 • Executive Committee, Leo Club of University of  
Peradeniya**

A member of the charter executive committee currently serving as  
the club treasurer.

**2021 - 2023 • Committee Member, IET on Campus**

Working as a committee member of IET on Campus as well as a  
university representative for IET Young Professionals network.

**2021 - 2022 • Webmaster, perabeats Media Society, University of  
Peradeniya**

**2021 - 2022 • Team Member, AIESEC Sri Lanka**

**2017 - 2018 • Member, Science Society, Dharmaraja College**

**2013 - 2015 • President, English Literary Association, Teldeniya  
National School**

- **Student Branch Ambassador for IEEEExtreme 17.0**

Working in the Sri Lanka Section IEEEExtreme organizing committee as  
the student branch ambassador for the year 2023.

- **Volunteer for IEEE Sri Lanka Section Student Activities Sub  
Committee (2022)**

Volunteered as a Creative Contents team member for the SLSAC for  
organizing of Student/YP/WIE Congress 2022 which held along with CS  
Global congress for 2022 and IEEE Boost 2022

- **Project Manager and Director of Finance at project Artha 2021**

A photography related virtual project with perabeats, media society of  
the university, that expanded for over 3 months consisting of  
workshops, competitions, and talks.

- **Graphic Designer at Youth for Climate Action 2021**

Was part of the team from University of Peradeniya for the COP26 UN  
Climate Summit 2021

- **Instructor for Arunella 2022**

Teaching instructor for G.C.E. O/L Seminar series, *Arunella*, conducted by  
the Engineering Student Union of University of Peradeniya.

*I hereby declare that the above-mentioned information is true and accurate to the best of my  
knowledge.*

*Viraj Ariyawangsha  
May 17, 2024*