

DINITH HERATH

 Github |  LinkedIn

317/A, Kananvila, Horana, Western Province, Sri Lanka. 12400

dinithherath18332@gmail.com | (+94)778370323

PERSONAL MISSION STATEMENT

A third-year engineering undergraduate who is passionate about mastering new technologies and has a keen interest on applying them to solve challenging problems in our everyday life. I portrait myself as a fast and curios learner who tries to learn new things.

EDUCATION

University of Moratuwa, Sri Lanka

September 2017 - Present

B.Sc. Eng (Hons.) in Electronic & Telecommunication Engineering

Currently studies in Semester 5 Year 3

- **Semester 1: Dean's List (SGPA: 4.00)**

- **Semester 2: SGPA: 3.63**

- **Semester 3: Dean's List (SGPA: 3.88)**

Overall GPA: 3.83/4.2

Modules undertaken:

Internet of Things Design and Competition, Robot Design and Competition, Graph Theory, Introduction to Telecommunication, Fundamentals of Computer Organization & Design, Analog and Digital Communications, Differential Equations, Linear Algebra, Random Signals and Processes

Ananda College, Colombo 10, Sri Lanka

2014 - 2016

G.C.E. Advanced Level in Mathematics, Physics and Chemistry 2016 (University Entrance)

- 3 A (High Distinction) passes

D.S.Senanayake College, Colombo 07, Sri Lanka

2003 - 2013

G.C.E. Ordinary Level (Junior High School)

- 9 A (High Distinction) passes

EXPERIENCE

iXD Labs

March 2020 - Present

Co-Founder & Product Lead (StartUp)

A team of 12 individuals passionate about software development, IoT, robotics etc. Here I learned to complete projects with in a given time, manage and collaborate with team members to focus everyone to achieve team's vision.

Website: ixdlabs.lk

British Council

September 2016 - April 2017

Member

In here I learned how to convey my messages to audience effectively and developed listening and speaking skills. I was able to successfully complete Upper-Intermediate Level I and II.

PROJECTS

Smart Robbery Prevention System

(Ongoing - 4 members)

This project aims at preventing robberies related to delivery services which are connected with Australian Post Network. Here a band and a device inside the delivery vehicle is used to achieve the task. Using Arduino, ESP32, BLE

Googong Smart City App

(Completed - 2 members)

A smart city app which allows users to find local community services, receive public announcements of events and upload public amenity faults supported by the smart city network in Googong, Australia. Using Flutter, eagle.io (Link | **App Store(Only inside Australia)**)

Portable Air Quality Detector - Pollutector

(Completed - 3 members)

Pollutector is a portable device which is designed to measure temperature, air quality, humidity, particle value and display in an native app which is available in both IOS and Android. Machine learning models are implemented on GCP to predict future values in each category. Using Arduino, NodeMCU, MQTT, Flutter, Firebase, BigQuery (Link | **Github**)

SunRu Tracking App

(Completed - Personal)

An app designed for SunRu Holdings PTY Ltd. in Australia to continuously tracking user location. Used in collaboration with existing navigation based system to ensure the user location when user inside the vehicle. Using Flutter

WiFi Analyzer

(Completed - 3 members)

A WiFi analyzer which is capable of detecting the location (predefined) of user based on a machine learning model trained on RSSI values of predefined locations. Using Arduino, NodeMCU, Python, Scikit Learn (Link | **Github, Github**)

Micromouse Robot

(Completed - 5 members)

Micromouse robot which navigates to the center of the maze and calculates the shortest path to achieve its fast run using curve turns. Using STM, Arduino, C++, Altium, Solidworks

Designing Autonomous Robots

(Completed - 5 members)

Designed **7 different autonomous robots** for local competitions. Robots for line following, wall following, maze solving, color line following, shooting ping-pong balls, detecting coins, water collecting and block moving. (Link | **YouTube**)

Auto Tuning Amplifier

(Completed - 4 members)

A Class D audio amplifier which is capable of tuning basic audio features such as base, treble, volume etc. by aid of a python program. Using LTSpice, Proteus Simulation, Altium, Python

Constant Current Source

(Completed - 4 members)

Constant current source which can supply 1A constant current to charge a typical 12V lead acid battery with a feedback loop for the battery voltage.

For more info about the projects explore my web portfolio at **dinithherath.github.io**

CERTIFICATES

- **Industrial IoT on Google Cloud Platform (Coursera)** (View Certificate)
- **An Introduction to Programming the Internet of Things (IoT) Specialization (Coursera)**
 - **Introduction to the Internet of Things and Embedded Systems** (View Certificate)
 - **Interfacing with the Arduino** (View Certificate)
 - **The Arduino Platform and C Programming** (View Certificate)
 - **Raspberry Pi Platform and Python Programming for the Raspberry Pi** (Ongoing)
 - **Interfacing with the Raspberry Pi** (Ongoing)
 - **Programming for the Internet of Things Project** (Ongoing)
- **Starting with Altium Designer (Udemy)** (View Certificate)
- **Hands-On Python & R In Data Science (Udemy)** (Ongoing)
- **Hands-On Artificial Neural Networks (Udemy)** (Ongoing)
- **ROS for Beginners (Udemy)** (Ongoing)

COMPETITION AWARDS

Robotics

- Finalist at SLRC 2018 *Sri Lanka*
- Two times consecutive finalist at SLIIT Robofest 2018,2019 *Sri Lanka*
- Participated in Xbotix 2018 *Sri Lanka*
- 2nd Runners-Up at SLRC 2017 *Sri Lanka*

Programming

- 11th place in Country in iEEEXtreme11.0 *International*

HONORS & AWARDS (OTHER)

- **Higher Distinction** at Sri Lankan Physics Olympiad Competition - 2017
- **Higher Distinction** at Sri Lankan Physics Olympiad Competition - 2016
- **Diploma in English** at Aquinas University College - 2014

TECHNICAL STRENGTHS

Languages	Sinhala (Native), English
Computer Languages	C++, Python, MATLAB, Dart, HTML, CSS, LaTeX
Designer Software	Altium, Solidworks, NI Multisim, Proteus Simulation
Robot Programming	Arduino, Python, Atmel Studio
Tools	VS Code, GitKraken
Operating Systems	Windows, Ubuntu, Debian OS
Online Cloud Platforms	GCP, Azure

EXTRA-CURRICULAR

- Mobile Photography and Travelling
- Badminton Player
- Member of E-Club of Electronic and Telecommunication Department

NON RELATED REFREES

Prof. (Mrs.) Dileeka Dias

Senior Lecturer,
Dept. of Electronic and Telecommunication
Engineering,
Faculty of Engineering,
University of Moratuwa,
Moratuwa, 10400,
Sri Lanka.
Tel- +94 11 264 0422 (ext: 3320)
Email: dileeka@ent.mrt.ac.lk

Dr. Peshala Jayasekara

Senior Lecturer,
Dept. of Electronic and Telecommunication
Engineering,
Faculty of Engineering,
University of Moratuwa,
Moratuwa, 10400,
Sri Lanka.
Tel- +94 11 264 0422 (ext: 3318)
Email: peshala@uom.lk