

# A.G.H. UDARIKA DEWMINI

I am a self-motivated individual with passion and ambition for innovation. I am a knowledge seeker and willing to get involved in the Software Development field with an exciting, and growing company. I would like to provide quality support to the company with my skills and would like to explore the latest developing technologies. I am eager to be challenged in order to grow and improve my communication and professional skills gained through studies and experiences.

#### **EDUCATION**

**SOUTH EASTERN UNIVERSITY OF SRI LANKA,** BSc (Hon's) Electrical and Electronic Engineering Final GPA: 3.73

# UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING

Course on Java application development using JavaSE

#### DHAMMISSARA M.M.V – GCE ADVANCED LEVEL

Chemistry (A), Mathematics (B), Physics (B), District Rank: 27

#### **WAYAMBA UNIVERSITY OF SRI LANKA**

Diploma in English

#### WORK EXPERIENCE

# 28<sup>TH</sup> SEPTEMBER 2020 – PRESENT

**LECTURER ON CONTRACT BASIS** –DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY - FACULTY OF TECHNOLOGY – SOUTH EASTERN UNIVERSITY OF SRI LANKA

- Teaching modules Fundamental of Programming (C Language)
- Network Switching and Routing

# **26<sup>TH</sup> NOVEMBER 2018 – 15<sup>TH</sup> FEBRUARY 2019**

INTERN ELECTRICAL ENGINEER, RESOURCE MANAGEMENT ASSOCIATION (PVT)

- Designing an optimal dispatch model for the Sri Lanka power systems, using MATLAB modeling software
- Researched on energy efficiency potentials to support a study on the national energy efficiency improvement potential

# 27<sup>TH</sup> MARCH 2017 – 30<sup>TH</sup> JUNE 2017

TRAINEE TELECOMMUNICATION ENGINEER, DIALOG AXIATA PLC

Training in group technology under Network Operation & Services Assurance-Enterprise Technical Assistance Center (VAS) -

- Designed a project management portal using HTML,PHP,CSS,JS, & MySQL
- Researched on active directory integration for VAS system

#### PROJECT AND RESEARCH EXPERIENCE

# FACIAL EMOTION RECOGNITION SYSTEM TO INVESTIGATE MICRO-EXPRESSIONS — FINAL YEAR RESEARCH PROJECT

The main concept of this project is to identify subtle innovatory human emotions using machine learning concepts and artificial intelligence. Databases were created to train in CNN layers and the accuracy of the training was analyzed by alternating different factors. And for the demonstration PC based executable graphical user interface was created to describe applications of the system.

Used language: Python Framework: Keras, Tensorflow

#### RESEARCH ON CAPACITY EXPANSION OF FIBER OPTIC NETWORK IN SRI LANKA

The aim of the paper is to propose technologies that could be adopted in Sri Lanka to increase the number of consumers in the existing FTTH connection.

http://ir.lib.seu.ac.lk/handle/123456789/3911

## ALGORITHM TO DETECT ERRORS ON CDR FILES, REAL-TIME

In the internship period at the Dialog VAS section, a researched-based algorithm was analyzed to detect errors in the CDR file using artificial intelligence on python.

Used framework: Tensorflow

#### PROJECT MANAGEMENT PORTAL

A website for the DIALOG VAS division to manage their projects and to keep tracks about their day to day projects.

Languages used: HTML, CSS, PHP, MySQL, JS

https://github.com/HiruDewmi/ProjectManagement-Portal

SPEED CONTROL OF DC MOTOR FAN USING A TEMPERATURE SENSOR (PCB Design) – Mini Project In this application, a temperature sensor was used with an Arduino kit to control a fan and change its speed concerning the temperature read by the micro-controller.

# HIGH PRECISION REFERENCE VOLTAGE CIRCUIT (PCB Design) - Mini Project

An extra voltage reference system with 0.01% precision is designed to avoid accuracy and stability errors and to supply a stable reference voltage to the system.

#### SKILLS

- Familiar programming languages: C++, C, HTML, PHP, MySQL, CSS, JAVA, & Python
- Circuit design and simulation using Proteus, EasyEDA & PIC C
- Familiar with Machine learning fields
- Framework and tools: Tensorflow, Keras, MATLAB
- Soft Skills: leadership, creativity, enthusiasm, adaptability, communication, and collaboration

#### **ACTIVITIES**

- Researching about Machine learning, computer vision, and Artificial intelligence
- Secretary of the Electrical & Electronics engineering Society (EEES), 2016 - 2019
- Founding board member of 'Agni Edge' university media club and an official announcer of the club
- Has won awards in an inter-faculty sports festival in table tennis, badminton & chess in the years of 2015 & 2017