

# ASHVIN MENDIS

## **OBJECTIVE**

To attain a position based on Electronic, Mechanical and IT in a renowned organization in the dynamics and competitive fields with the intention of contributing to the growth of the company with my knowledge while uplifting my professional skills.

#### **PORTFOLIO PROFILE:**

<u>ashvinmendis.github.io/ashvin</u> mendis

#### PERSONAL INFORMATION

Full Name: Balapuwaduge Dinindra Ashvin Mendis

Gender: Male

Birthday: 24<sup>th</sup> August 1995 Nationality: Sri Lankan

#### CONTACT DETAILS

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Gampaha.

# **ACADEMIC QUALIFICATION**

- Certificate course in web developing design and development at NIBM. (2020)
- Master of Engineering (Hons) Mechatronics Engineering Classification: Second class upper division Awarded by University of Wolver Hampton UK. (2018-2019) Institute – CINEC Campus, Malabe.
- Bachelor of Engineering (Hons) Mechatronics Engineering Awarded by University of Wolver Hampton UK (2015-2018) Institute – CINEC Campus, Malabe.

## Project: Smart Gloves for Deaf (Group)

Smart-gloves convert the sign language into words(voice) via a mobile application. This creates the opportunity for the deaf persons to communicate with others. Solely designed the smart-glove circuit -PCB (similar to the size of a smart-watch) and the Bluetooth master-slave programming with Arduino.

#### Project: Pet Feeder Robot (Individual)

Enable to feed pets with the Pet Feeder Robot by using the mobile application without distance barriers and watch the pet with mini-cameras of the robot. Can fully control by a smart phone. Designed the robot by Solidworks and lacer cut from metal and acrylic. Designed the circuit (PCB) and programed with Raspberry Pi. Designed the GUI with Python.

# Project: 3 in 1 Electric Coconut Scraper (Group Innovation)

3 in 1 Electric Coconut Scraper can grind, scrape the coconut and squeeze the scraped coconut. Designed a new mechanism as a group to control all the tasks from one gear motor. Contributed in Solidworks designing and intellectual part of the innovation.

## Project: Smart Railway Gate System (Group Project)

Automatically the railway gates get open and closed with the IR sensors and active the railway signal lights. Solely did the programing with Arduino.

Project: Gasoline Two Passenger Motorcar (School 90th Anniversary)

A motor car fully designed and developed by the group. Solely build the electronic security system to start the motor car.

Advance Level-Bandaranayake College Gampaha (2014)

#### TECHNICAL KNOWLEDGE & SKILLS

- Programming: C++|C#|Python| HTML| CSS | JavaScript | PHP | MySQL
- Development Tools: Arduino | Android Studio | Node Red | Visual Studio
- **Designing Tools:** Eagle | Proteus | Solidworks
- Microcontrollers: ESP8266 | ESP32 | ATmega Microchips | PIC
- Other: Microsoft Office | Adobe Elastrator
- Have advance skill of designing circuits and soldering SMD.
- Excellent with Arduino, Eagle CAD, Proteus simulator.
- GPIO, I2C, MQTT protocols.
- Intermediate with Android studio, Solid work, Raspberry Pi and PIC programming and Matlab.

#### **WORKING EXPERIENCE**

# 1. DIMO LANKA – DIMO Digital (August 2019-December 2020)

- **Project: IR AC Controller** Designed a circuit and programmed which can turn off and turn on any air conditioner with the window state (window open or close). Implemented the unit hardware and software for sate of a door and human detection.
- Project: Power monitoring Designed circuit which can measure voltage, current & power and send values to MQTT server true WIFI. Used ESP-12F microcontroller. Edited firmware and developed programming code by Arduino. Developed an Android mobile application and designed a dashboard using Node-Red to monitor the live data values by using MQTT messaging protocol.
- Inspect the BYD full electronic car chargers of DIMO clients, Worked on GPS platform.

## 2. ORANGE ELECTRIC – Research and Development (July 2017- January 2018)

- **Project: Touch switch Panel (Individual)** 8 gang touch switch board, which can be controlled by Bluetooth. Designed the circuit, Arduino programming and developed demonstrate mobile application using MIT app inventor.
- **Project: Light Dimmer (Individual)** Designed the circuit which can dim AC 230V bulbs and the Arduino programming.
- Project: Power Supply (Individual)- Designed 230V AC to 5V DC power supply circuit.
- Participated and conducted as an Orange volunteer in MICROBIT project which have organize by the government and Orange Electric for school students and teachers at BMICH.

## PERSONAL PROJECTS

- **Smart Curtain System** Designed a circuit and a mechanism to roll up and roll down the curtain. It is controlled by smart phone with WIFI. Used ESP-12F microchip.
- **RFID Smart Gate Lock System** Designed a circuit and a mechanism to integrate the gate locker which can unlock by RFID card and smart phone. Used RFID module and ESP-12F microchip.
- **Automatic Room Lightning Controller** Used IR proximity sensor. Designed a circuit. When entering the room, the light automatically turns on and when leaving it automatically turns off.
- **Obstacle Avoiding Robot** A robot which can move avoiding the physical obstacles on the way.

# **EXTRACURRICULAR ACTIVITIES**

- Member of chess club CINEC (2018-2019).
- President (2018) and Vice president (2017) of youth fellowship St. John the Baptist Gampaha.
- Member of school Aeronautical Society (2013-2014).
- Member of school Chess Club, Karate team (participated for tournaments) and Environmental Conservation Circle.
- Interest in Kung Fu, Badminton, swimming and playing guitar, violin & piano.

# NON-RELATED REFEREES

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