Jameel Hassan Abdul Samadh

jhassan.tck14@gmail.com

L +94 77 920 8081

34/A, Weerakoon Gardens, Kandy

Education

University of Peradeniya, Sri Lanka BSc Engineering (Hons) - July 2020 Electrical & Electronics - CGPA 3.61/4.0

Trinity College Kandy, Sri Lanka Physical Science stream. Graduated 2014

Technical Skills

MATLAB, Python, Optimisation, Eagle, ArduinoC, Assembly Language, C

Interests

Robotics, Machine Learning, Signal Processing Computer Vision, Image Processing

Experience

Research Engineer, Faculty of Engineering, University of Peradeniya

August 2020 - Present

Computer Vision

Research on the identification of contact hot spots using CCTV footage using depth estimation and motion tracking. The research is primarily focused as an aid to tackle Covid-19 contact spreads using computer vision.

Engineering intern, Vega Innovations, Sri Lanka

Feb 2019 - May 2019

Eagle, PowerSim

Role: Tested the power module for electric vehicle charging unit, Designed the wiring circuit for a hydroponics rack

- Carried out tests for the electric vehicle fast charging power module.
- Completed the wiring design for the hydroponics rack used for smart plant growth.

Volunteer Instructor, Faculty of Engineering, University of Peradeniya

Feb 2020 - July 2020

• Introduction to Electrical Engineering: For 1st year undergraduates

Publications

- Umar Marikkar, A. S. Jameel Hassan, Mihitha S. Maithripala, Roshan I. Godaliyadda, Parakrama B. Ekanayake and Janaka B. Ekanayake, "Modified Auto Regressive Technique for Univariate Time Series Prediction of Solar Irradiance", 2020 15th IEEE International Conference on Industrial and Information Systems (ICIIS).
 - -Accepted with minor revisions

Researches & Projects

Undergraduate Research Project, University of Peradeniya Smoothing the Output of a Large number of small scale Renewables Machine Learning, Signal Processing

June 2019 - June 2020

Tools & Tech: MATLAB, Python, Convex optimisation, Autoregression, Neural networks, Fuzzy logic **Role:** Optimisation of the power distribution, Design and coding of algorithm, Classification of day type using fuzzy logic

- Designed an optimised scheduling and control algorithm to predict the power outputs of the stochastic renewable systems such as solar and wind plants.
- The net output power is aggregated to supply a load demand from a specific energy market.

Eagle, ArduinoC, ATTiny13

• Designed a smart headphone that automatically responds to haptic sensor feedback. An Attiny13 microcontroller was used, which was programmed using Arduino Uno.

Automatic Light Controller

June 2018

Assembly language, PIC

• Designed an automatic light controller which keeps count of people within a room to switch ON/OFF the lights. A PIC16f84A programmed using assembly language was used to control the lights.

Awards

- GCE A/L Best results Trinity College Kandy, Sri Lanka 2014 3As
- Finalist of "International Energy and Electricity Market Business Decision Simulation Competition 2019" organised by Shanghai University of Electric Power.
 - ✓ One of the three teams representing Sri Lanka.

Extra Curricular Activities

Global Shaper- Kandy Hub, Under World Economic Forum

March 2020 - Sept 2020

Basketball, University of Peradeniya. Sri Lanka

- Half Coloursman
- 2nd Runners up- Sri Lanka Inter University Games 2018

Drama Society, University of Peradeniya. Sri Lanka

- Crew Leader- Faculty of Engineering (2018)
- Champions 2016, Runners up 2017 & 2018

Football, Trinity College Kandy. Sri Lanka (1st XI - 2012-2014)

School Officer(Prefect), Trinity College Kandy, Sri Lanka (2013/2014)

Me

Languages: Writing, Speaking and Reading (English, Tamil & Sinhala)

Skills: Effective communication & presentation, Teamwork, Leadership

Hobbies: Travelling, Reading, Sports, Family & Friends

Referees

Prof Janaka Ekanayaka, B.Sc.Eng, PhD (UMIST), CEng, FIEEE, FIET, FIESL Chair of Electrical & Electronic Engineering Faculty of Engineering, jbe@ee.pdn.ac.lk Dr Roshan Godaliyadda B.Sc.Eng, PhD (NUS) Senior Lecturer, Faculty of Engineering, roshangodd@ee.pdn.ac.lk