Shamil
Ihalagedara

Graduate
Electrical and Electronic Engineering

Electrical and Electronic Engineering undergraduate with a strong emphasis on logical reasoning, a sincere love of collaboration, and a solid background in leadership. A quick learner who enjoys a challenge with an approach of precision and a problem-solving mindset, driving projects to successful completion. Passionate about Machine Learning, Communication, Embedded Systems and Signal Processing.

Education

BSc. Engineering - University of Peradeniya
2018 - 2023
- Electrical and Electronic Engineering
- GPA - 3.4/4.0

Pannala National School
2003 - 2017
- GCE A/L - 2As and 1B

Dip. in English - Wayamba University, Sri Lanka
2017 - 2018

Experience

Trainee Engineer
Dialog Network Services | 2022
- Twenty weeks of industrial training covering mobile technologies, transmission network, base station subsystem operations, hardware configurations, and power systems used in Dialog communications

Industrial Coordinator
Electrical and Electronic Engineering Society - UoP | 2022 - 2023

Secretary
IEEE Communications Society - UoP | 2022 - 2023

Assistance Secretary
Electrical and Electronic Engineering Society - UoP | 2021 - 2022

Committee Member
Electrical and Electronic Engineering Society - UoP | 2020 - 2021

Technical Skills

Programming Languages
- Python
- MATLAB
- C
- C++
- HTML/CSS
- Assembly

Software
- Mininet
- Cisco Packet Tracer
- KiCAD
- Protius
- AutoCAD
- Office Package

Personal Information

Date of Birth
19/01/1999

Gender
Male

NIC No.
990190470V

Nationality
Sri Lankan

Non Technical Skills
- Leadership
- Teamwork
- Communication

Languages
- English
- Sinhala

Interests
- AI and Machine Learning
- Networking
- Communication Systems
- Signal Processing
- Embedded Systems

Contact
- Temple Road, Makandura, Gonawila
- +94 77 451 1295
  +94 31 229 9299
- ihalagedara.shamil@gmail.com
- linkedin.com/in/shamil99
- github.com/Ihalagedara

Achivements

e-Yantra Robotics Competition (Team) - IIT Bombay | 2022-2023
Participation
World wide Robotic Competition

iCS Hack the World 2.0 (Team) - UCSC | 2021
Second Runners Up
Inter University CTF Competition

IEEE Xtreme 15.0 | 2021
Participation
World wide coding hackathon

YES HUB Bootcamp | 2021
Participation
Hackathon

INNOVATORS (Team) | 2019
Second Runners Up

Professional Affiliations

- Student member of IESL
- Student member of IEEE
- IEEE Communication Society Student Member

Extra Curricular Activities

- Wushu Player - University of Peradeniya
- Volunteered in Arunella social project

References

Prof. Lilantha Samaranayake
Head of the Department
Department of Electrical and
Electronic Engineering,
University of Peradeniya,
Sri Lanka.
Tel. No.: +94 81 239 3426
Email: lilantha@eng.pdn.ac.lk

Prof. Maheshi Dissanayake
Professor - Department of Electrical
and Electronic Engineering,
Faculty of Engineering,
University of Peradeniya,
Sri Lanka.
Tel. No.: +94774229856
Email: maheshid@eng.pdn.ac.lk

Publications

Implementing an Intrusion Detection System for Software Defined Networks using Artificial Intelligence | 2023
S.B. Ihalagedara, M. Koswaththa, S. Senevirathna, M.B. Dissanayaka, A. Udunuwara,
Peradeniya University International Research Sessions (iPURSE), vol. 24, 2023.

Research and Projects

Implementing an Intrusion Detection System for Software Defined Networks using Artificial Intelligence | 2023
Development of a Machine Learning and Deep Learning based intrusion detection model for a Software Defined Network using anomaly detection techniques with increased data security, simulated using Mininet Network Simulator.
- Contribution - Network Security, Deep Learning, Machine Learning

Image and Video Compression System | 2022
Designing a system using Huffman coding to increase the image and video compression for the Image and Video Coding module
- Contribution - Python Programming

Biometric-based mobile attendance tracking device for educational sector | 2022
ESP8266 microchip-based attendance tracking device designed with a web application for the Electronic Product Design module
- Contribution - PCB design, Web Development, ESP8266 Programming

Data Analysis on Variation of Weather and Its Impact on Crop Management and Harvesting | 2021
Using Machine Learning to determine the variation of weather and its impact on crops.
- Contribution - Machine Learning, Data Analyzing

Digital Height Meter | 2020
PIC16F877A microchip-based embedded system design project for calculating height using the variations in angle, programmed using Assembly programming language.
- Contribution - PIC Programming

Computer vision based traffic light system
Using OpenCV to detect the vehicles and road lanes to determine the traffic flow.
- Contribution - OpenCV

Mini Projects
- Water Level Sensor
- Automatic line following Robot
- Student Registration System - C Programming