Nilakna Disiwari Warushavithana

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Summary

An enthusiastic student in electronics and telecommunication engineering who strives to enhance knowledge and solve real life problems. Interested in electronics projects and research. A hockey player and a clarinetist.

Education

University Of Moratuwa, Sri Lanka, Undergraduate   2023 - 2027

- B.Sc.(Hons) in Engineering (UG) in Electronics and Telecommunication
- CGPA: 3.95/4.0, Dean's list (Semester 1-3)

Visakha Vidyalaya, Colombo   2013 - 2022

- **G.C.E. Advanced Level 2021(2022)**, Physical Science Stream
  - Island 6th, Colombo District 3rd
  - 3 As for Combined Mathematics, Physics, Chemistry with 2.8644 Z-score
- **G.C.E. Ordinary Level 2018**
  - Island 1st
  - 9 A's for Mathematics, Science, Information and Communication Technology, Geography, English, Sinhala, History, Religion, Western Music

Experience

SLT Mobitel, Engineering Office, Network Planning and Operations Division, Intern

Welikada, Sri Lanka
Oct 2023 - Jan 2024
Full-time, 3 months

- Prepeared technical analyses and reports for network planning.
- Developed a programme for realtime license plate recognition of Sri Lankan vehicles.

World Wildlife Fund, Environmental and Disaster Management, Intern

Remote
March 2023 - Present
Part-time

- Developing a mobile application for demonstrating nature-based solutions for flood management.

Skills

Techinical Skills

- Programming: Python, C++
- Mobile and Web: Flutter, Figma, PHP, HTML, CSS
- Tools: LTSpice, Solidworks, Unity, Matlab, Altium, Arduino

Soft Skills

- Languages: English, Sinhala

Achievements

Silver Medalist National Chemistry Olympiad 2022

Island 6th G.C.E. Advanced Level Physical Sciences 2021

Island 1st G.C.E. Ordinary Level 2018

Awards

University of Moratuwa

- University Colours for Hockey 2023

Visakha Vidyalaya

- **Head Prefect** of the school 2020 award and trophy

- Susan George Pulimood Educational Trust Scholarship 2021 for the **best all round** performance in academic and extra-curricular activities
- **Best All Rounder of the school** 2020 Award, Mrs. Jeremias Dias memorial gold medal, Mr. and Mrs. A. De A. Rajapakse memorial shield and trophy
- **Best All Rounder of the Junior Secondary section** 2018 award and trophy
- Prize for the **best results** of school at G.C.E. **A/L** 2021 in physical science stream, Mr. S Thilakarathne memorial gold medal and Trophy
- Prize for the **best results** of school at G.C.E. **O/L** 2018 and trophy
- School colours for Mountaineering 2020

Projects

App for demonstrating nature-based solutions of flood management
June 2022 - present
- Develop a mobile application with augmented reality features for demostrating nature-based solutions for flood management.
- Tools: Unity3D for AR, Flutter for mobile app front-end, Firebase back-end.

License plate recognition with computer vision
Dec 2023
- Developed a programme for realtime automatic license plate recognition for Sri Lankan number plates with computer vision and a web-based user interface for visualizing results.
- Tools: OpenCV and Python for Machine Learning; HTML, CSS, and Flask for web application.

SmartGlow - a smart bulb adapter (team Spark07)
Mar - Aug 2024
- SmartGlow is a smart light bulb adapter which seamlessly integrates IoT switching with manual operation through a mobile app.
- Worked on the initial circuit design, enclosure design, pcb assembly, enclosure assembly, and pcb testing and debugging.
- Tools: Solidworks, LTSpice.

Right Vote - AI powered election prediction app (team LLMinators)
Sep 2024
- I worked on the web app front end to visualize the results of the win prediction analysis and integrating the AI chat bot for a realtime dynamic experience. Also, worked on a regression model to support the analysis of win prediction.
- **Awards:** Finalists at the AI Challenge, IEEE Sri Lanka Section 2024
- Tools: Flutter for web app, Python for regression.

TransmittixApp - point-to-point custom communication link
Sep 2024
- The custom communication link is reliable upto 133 meters for the two conected devices. The GUI features a versatile user interface to send and recieve images, audio, video, and text files and enables a live chat.
- I worked on designing the synchronization process to minimize errors, crafting the GUI frontend using Python-Tkinter, and developing the live chat feature.
- Tools: GNU Radio, BladeRF, RTL-SDR, Python.

Non-technical Projects

May 2024 - Present
- **Chairperson, *Phoenix Club*:** A competitive mathematics training programme from the mathematics society. Coordinated training sessions twice a week for the participants.

Jan - Mar 2024
- **Chairperson, *AKURU*:** A library development initiative for Deegabya School Anuradhapura under the Rotaract Club of University of Moratuwa. Collected and donated 2500 books including educational and literature collections were along with renovated library facility.

Dec 2022

- **Volunteer, Business Research Unit**, University of Moratuwa, Sri Lanka, for the annual International Conference in Business Research (ICBR) 2022.

Extra-curricular Activities

University of Moratuwa

Hockey 2023 - present
- **Sri Lanka Women's Junior National Hockey Tournament** 2023(2nd) & 2024(3rd) - Represented the Sri Lanka Universities team.
- **Sri Lanka University Games** - Represented the University of Moratuwa team in 2023
- **Inter University Games** - Represented the University of Moratuwa team in 2024

Mathematics Society 2023 - present
- **President** of the Mathematics Society 24.25
- **Director** of Education in Competition Coordination 23.24
- **Chairperson**, *Phoenix Club*, Competitive mathematics training programme.
- **IMC team** Selected as one of the four students to represent the university at Mathematics competitions.

AIESEC in University of Moratuwa 2023 - present
- **International Relations Team Leader** of incoming Global Talent, Winter 24.25
- **International Relations Manager** of incoming Global Talent, Summer 24.25
- **Sales Panelist** of incoming Global Talent, Winter 23.24

Electronic Club 2023 - present
- **Web designer** of Public Relations pillar, 24.25

Visakha Vidyalaya

Prefects Guild, Head Prefect 19.20, Junior Prefect 17.18 2017 - 2021
- Leading the main student leadership body and organizing school events as the head prefect.
- Conducting community projects- medical supplies donation to Colombo East Base hospital, school supplies donation to Iddamalgoda senior school, meditational retreat program, blood donation camp, leadership camp.

Hockey team, Team player 2014 - 2021
- Western province champions 2020 and 2nd runners up 2018, all island champions 2013

Western Band, Principal Clarinetist 2016 - 2020
- Organized Reiwa music concert 2020, performed at school events and invitational band shows, all island competitions–2nd place 2019
- Recorder ensemble competitions– all island 1st (2017, 2019), provincial 1st (2015, 2016)

Mountaineering, Won the all island mountain running championship in 2018. 2017 - 2020

Science Quiz team, Competed in interschool competitions. 2020 - 2021

Design Club, Won the best designer award at the *Epiphany* fashion show. 2015 - 2020

ICT Society, Organized ICT exhibitions, presented Arduino projects. 2015 - 2020

Girl Guiding, Second class award. 2016 - 2019

Music

Colombo Wind Orchestra, Clarinetist   2020 - present

Junior Symphony Orchestra, Clarinetist   2023 - present

Certification, Trinity College London
- Theory of Music Grade 8 Proficiency with Distinction
- Pianoforte Grade 5 Proficiency

Instruments: Piano, Clarinet, Drumkit

Other Interests

Hiking and exploration