

THAMISH WANDURAGALA

Department of Computer Engineering, University of Peradeniya, Sri Lanka.

📞 +94 77 323 7509 | 🏠 Kandy, Sri Lanka | ✉️ thamish777@gmail.com |
🌐 [linkedin.com/in/thamish-wanduragala](https://www.linkedin.com/in/thamish-wanduragala) | 🐙 github.com/Thamish99

ABOUT ME

I am a motivated final year computer engineering undergraduate, interested in all aspects of product development involving software, hardware and machine learning. Presently, I am actively pursuing career opportunities which utilizes innovative problem-solving approaches where I would be able to make meaningful contributions.

EDUCATION

University of Peradeniya	2019 November - Present
• Bachelor of the Science of Engineering Honours in Computer Engineering	GPA: 3.95/4.0
Trinity College, Kandy	(2004 - 2018)
• G.C.E. Advanced Level (2018) - 2As, 1B in Physical Science Stream.	
• G.C.E. Ordinary Level (2015) - 8As, 1B (English Literature)	

EXPERIENCE

Visiting Research Assistant	2023 August - 2024 January
• Supervised by Prof. Yuen Chau at Engineering Product Development Pillar, Singapore University of Technology and Design (SUTD).	
• Contributed to a 6G Research and Development Project based on developing Wireless Communication Devices in collaboration with Nanyang Technological University (NTU).	

Teaching Assistant	2022 October - Present
• Supervised weekly sessions for 2nd, 3rd year undergraduates of Department of Computer Engineering, University of Peradeniya for course modules, * Operating Systems, Signal Processing, Programming Methodology (Based on C Programming Language), Digital Design (Based on circuit building.)	

Voluntary	2020 May - Present
• <u>Project Nenathambara</u> Contributed to making a new syllabus for Python programming language beginners and delivered the content to students in schools in Sri Lanka.	

PROJECTS

Neuromorphic Architecture for Spiking Neural Networks (Group) Verilog	2023 December - Present
• A neuromorphic accelerator architecture that is optimised to run smaller scale Spiking Neural Networks (SNNs), using a network of nodes optimised for high speeds and low power consumption.	
• Contributed to making the architecture and testing its performance.	
Automated Road-Rule Detector (Group) Python, Flutter, Firebase, Nodejs	2022 October - 2023 January
• A hardware device based on raspberry pi 3 as the microprocessor which is able to detect road rule breaking severity with an app to visualize collected data.	
• Contributed to the Front-End and Hardware.	
2-bit Intelligent Reflective Surface Prototype (Group) Python, Matlab	2023 August - 2024 January
• A 6G Wireless Communication research project focused on researching about Intelligent Reflective Surfaces (IRS).	
• Contributed to making the controller of the IRS.	

ML-based Patient Diagnosis/Care (Group) | Python, Nodejs, Flutter

2023 May - Present

- An app designed to get symptoms from a user and provide insights and suggestions on potential risks, recommended eating habits and recommendations on type of medical doctor to visit.
- Contributed to the Machine Learning model and the Back-End.

Student Results Management System (Group) | Java, Android Studio

2021 November - 2022 March

- An application developed for undergraduates to keep track of their academic performance, progress.
- Contributed to the Back-End of the system.

Smart Inventory Management System (Group) | Laravel with php, blade, MYSQL

2022 May - August

- Introduced a resource scheduling system to manage resources in the MakerSpace Lab (Department of Computer Engineering, University of Peradeniya).

8-bit Single Cycle Processor (Group) | Verilog

2021 November - 2022 March

- An 8-bit single cycle processor with an ALU, register file, control logic, data memory, data cache, instruction memory and instruction cache. A memory hierarchy too was built.

Database System at University Gymnasium (Group) | MySQL, Php

2021 November - 2022 March

- A fully functional database to organize reservations, cancellations, borrowings and misplacements of equipment at a gym.

Inventory Management System for several companies (Individual) | C#, Java

2020 August

- Introduced a complete Inventory Management System for business entities through project opportunities at ESOF, Kandy.

LEADERSHIP / EXTRACURRICULAR

SKILLS

Offices Held

- President, Ceylon University Dramatic Society, University of Peradeniya. (2022-2023)
- Secretary, Aviation Society, Trinity College, Kandy. (2017-2018)

Sports

- Baseball U19, U17, U15, U13 - Trintiy College, Kandy. (2011 - 2017)

Aces Hackathon 2023 (Group)

June 2023

- 2nd place in "Other" category - Two day competition with 40+ participating teams.

Global Robotics Games (Group)

November 2023

- 1st place in University Category - Three day competition based on developing robotic controllers for Transformer Robot Soccer League.

Aces Pre-Coders 2022 (Group)

August 2021

- Finalists - A 6 hour coding competition with 70+ participating teams.

Programming Languages: Python, Java, C, C#, Dart

Hardware Programming: Verilog, ARM Assembly

Mobile Development: Flutter, Native Android

Front End: HTML/CSS, Bootstrap

Back End: Spring Boot, Nodejs

Data Modeling: Numpy, Pandas, scipy, sklearn

Databases: MySQL, FireBase

Version Controlling: Git

REFEREES

Dr. Asitha Bandaranayake | asithab@eng.pdn.ac.lk **Dr. Isuru Nawinne** | isurunawinne@eng.pdn.ac.lk

Senior Lecturer,
Faculty of Engineering, University of Peradeniya,
Peradeniya, Sri Lanka.
+94 71 511 7771

Senior Lecturer,
Faculty of Engineering, University of Peradeniya,
Peradeniya, Sri Lanka.
+94 81 239 3470