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<https://github.com/e19166> | Kandy

## EDUCATION

University of Peradeniya   Undergraduate   BSc. Eng(Hons.) in Computer Engineering	2021 Mar - present GPA: <b>3.90 / 4.00</b>
Pushpadana Girls' College, Kandy   G.C.E. Advanced Level Examination	2010 - 2019 District Rank (Kandy) - <b>2 / 6616</b> , National Rank - <b>20 / 94,619</b> Z-Score: <b>2.2270</b>

## PROJECTS (SELECTED)

<b>HydroGrowPro: Automated Hydroponic System</b> / Group /  	2023 Oct – 2024 Jan
<ul style="list-style-type: none"><li>• An 'IoT-Based Automated Hydroponic System' project, utilizing technology to optimize hydroponic farming, reduce resource use, and enhance data-driven crop management</li><li>• Contribution: Model Development, Hardware Design &amp; Implementation using ESP32 via platformio, Developing connection between nodes and AWS using MQTT</li><li>• Technology: Esp32, Maven, Flutter, AWS, JWT</li><li>• Techniques: <b>MQTT, Platformio, Github Actions, Docker</b></li></ul>	
<b>GymHub: Web Application for a Gym</b> / Group /  	2023 Sep – 2023 Nov
<ul style="list-style-type: none"><li>• A Web development of 'GymWeb App', a comprehensive fitness platform designed to transform fitness management for athletes, trainers, and enthusiasts alike.</li><li>• Contribution: Real-time progress tracking through fitness logs and measurements, Personalized workout plan(amount of calorie burn)and goal setting</li><li>• Technology: Java, Javascript, CSS, Mysql</li><li>• Techniques: <b>JWT, React, Springboot</b></li></ul>	
<b>SHOPFINITY.COM: Online Shopping System</b> / Group /  	2023 Jul - 2023 Oct
<ul style="list-style-type: none"><li>• 'Online Shopping Database Management System (OSDMS)', a system that optimizes e-commerce operations, simplifies order processing, and provides valuable data analytics for strategic decision-making</li><li>• Contribution: System modelling with database, User Management, Shopping Cart, Order Processing, Inventory Management, Search and Filtering</li><li>• Technology: <b>PHP, MySql</b></li></ul>	
<b>Library Management System Web App</b> / Group /  	2023 Jun - 2023 Aug
<ul style="list-style-type: none"><li>• A development of a 'Library Management System', an application designed to automate library operations and enhance efficiency for librarians and staff..</li><li>• Contribution: Circulation magagement : The system streamlines library operations by automating the circulation process. It efficiently manages book checkouts, renewals, and returns, tracks due dates, sends overdue reminders, and handles fines for late returns, ensuring smooth and organized transactions.</li><li>• Technology: React.js, Spring boot, Mysql</li><li>• Techniques: <b>JWT, Apache, Xampp</b></li></ul>	
<b>BitPredictor: Bitcoin Cost Forecast System</b> / Group /  	2024 Mar - Present
<ul style="list-style-type: none"><li>• The development of a machine learning solution for accurate and timely Bitcoin price prediction, leveraging advanced algorithms and data analysis techniques</li><li>• Contribution: End to end planning, Multivariate LSTM Model Development, RNN Model Development (up to now)</li><li>• Technology: Python, Google Colab</li><li>• Techniques: <b>Github, Multivariate LSTM Model, ARIMA Model, Random Forest Model</b></li></ul>	
<b>ACES Project Fund Request System</b> / Group /  	2024 Mar - Present
<ul style="list-style-type: none"><li>• A web based software to handle requests to the ACES Project Fund</li><li>• Contribution: Software Modelling, Requirements Definition (up to now)</li><li>• Technology: React, Node js, MongoDB</li><li>• Techniques: <b>Github, Mern Stack</b></li></ul>	

## COMPETITIONS

**Robofest | An annual robotic competition geared to expose the robotic design talents of university students all around the country | The Department of Electrical and Electronic Engineering at the Sri Lanka Institute of Information Technology (SLIIT)**  
2022

<b>ACES Pre Coders v10.0   An Inter university 6 hour coding competition, University of Peradeniya</b>	2023
<b>ACES Coders V10.0   An Inter university 12 hour coding competition, University of Peradeniya</b>	2023
<b>IEEEExtreme 17.0   A 24 hour global algorithmic programming competition, IEEE</b>	2023
Team Name – WMaster	
<b>Hackathon   An inter-university hackathon organized by the University of Peradeniya</b>	2023
<b>RealHack   A Hackathon Organized by the Software Engineering Students' Association, the University of Kelaniya in collaboration with IEEE Student Branch.</b>	2023
<b>MoraXtreme 8.0   An Inter university 12 hour coding competition, University of Moratuwa</b>	2023
<b>DVCON India   C-DAC's VEGA microprocessor (RISC-V) based Design &amp; Verification Challenge</b>	2024 April – Present
<b>ICCAD   A challenging, multi-month, research and development competition, focusing on advanced, real-world problems in the field of Electronic Design Automation (EDA)   IEEE</b>	2024 May – Present
<b>IEEE Vesak Verse 24   AI Digital Art Competition   IEEE Student Branch of SUSL</b>	2024 May - Present

## EXPERIENCES

<b>Casual Instructor   Department of Computer Engineering, University of Peradeniya</b>	2022 - 2023
GP106 Computing, CO222 Programming Methodology	
Supervised 2hr long weekly lab sessions based on C programming language and Python programming Language	
<b>Instructor   Project Nenathambara   ACES   University of Peradeniya</b>	2024
Conducted Arduino with Micro C language sessions for school students	

## INTERESTS

Artificial Intelligence	Machine Learning	Embedded Systems	Web Development
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## TECHNICAL SKILLS

<b>Languages</b>	Python, C, Java, JavaScript, HTML/CSS, SQL, Verilog HDL, ARM Assembly, Matlab, Micro C, Tailwind CSS
<b>Databases</b>	MySQL, MongoDB, Amazon RDS
<b>Libraries</b>	Pytorch, NumPy, Matplotlib, pandas, Scikit-Learn, TensorFlow
<b>Frameworks</b>	React.js, Spring, ESP32, Arduino, Node.js
<b>Developer Tools</b>	Git, Github, AWS, VS Code, Adobe Photoshop, Autocad, Fusion 360, 3ds Max, Wordpress, Visual Studio, Pycharm, IntelliJ, MongoDB
<b>Operating Systems</b>	Windows, Linux

## CERTIFICATE COURSES (SELECTED)

<b>AWS Free Tier: Introduction to Monitoring Services (2023):</b> AWS Training & Certification	
<b>AWS Free Tier: Introduction to Managing Services (2023):</b> AWS Training & Certification	
<b>AWS Free Tier: Introduction to Offerings (2023):</b> AWS Training & Certification	
<b>Introduction to Linux (2022):</b> The Linux Foundation (through Edx)   Credential ID - dd2f2f4427ba46fbb105ddadb54ecabe   Credential URL - <a href="#">Certificate</a>	
<b>CS50 – Introduction to Computer Science (2022):</b> HarvardX – An Online Initiative by Harvard University through edX   Credential URL - <a href="#">Certificate</a>	
<b>Cybrary Orientation (2022):</b> Cybrary	
<b>Cloud Governance Principles (2022):</b> Cybrary	
<b>Course on Career Development (2023):</b> Career Guidance Unit – University of Peradeniya	
<b>Python For Beginners (2022):</b> Centre for Open & Distance Learning Department of Computer Science & Engineering University of Moratuwa (Online)	
<b>Programming for Everybody (2021):</b> University of Michigan (through Coursera)   Credential URL - <a href="#">Certificate</a>	
<b>Pearson Certificate for Assured Diploma in English (2020):</b> Esoft Metro Campus	
<b>Pearson Certificate for Assured Diploma in Information Technology (2020):</b> Esoft Metro Campus	
<b>Engineering Drawing and 3D Modelling using AutoCAD (2020):</b> Techview – Institute of Computer Aided Engineering	
<b>International Institute of Music, Speech &amp; Drama: Spoken English Examination (99 Marks out of 100)</b>	

## ACHIEVEMENTS

<b>Proficiency   Annual Prize Giving – K/Pushpadana Girls' College</b>	2010 - 2019
<b>SciChallenge Quiz Competition   Faculty of Science – University of Peradeniya</b>	2017
<b>Science Day Quiz Competition   Third Place   K/Mahamaya Girls' College</b>	2017
<b>Inter School Netball Championship   Semi Finalist   Central Province</b>	2012
<b>Sri Lanka Festival of Music, Dance &amp; Speech   Silver Medal   Verse speaking</b>	2011

**EXTRA-CURRICULAR ACTIVITIES**

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Volunteer   IEE RAS (Robotics & Automation Society)   University of Peradeniya	2021 - 2022
Member   Robotics Society   University of Peradeniya	2022 - Present
Member   Rotaract Club   University of Peradeniya	2022 - Present
Volunteer   Project Nenathambara   ACES   University of Peradeniya	2024
Volunteer   Project Arunella   University of Peradeniya	2021 - 2022

**REFERENCES**

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**Prof. Roshan G. Ragel** / [roshanr@eng.pdn.ac.lk](mailto:roshanr@eng.pdn.ac.lk)

*Head of Department, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka*

**Dr. Isuru Nawinne** / [isurunawinne@eng.pdn.ac.lk](mailto:isurunawinne@eng.pdn.ac.lk)

*Senior Lecturer, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka*