

DANUJAN SIVASUNDARALINGAM

Department of Computer Engineering, University of Peradeniya

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PROFILE

A passionate 3rd year Computer Engineering undergraduate with a keen interest in **Software Engineering, Machine Learning** and **DevOps**. Actively seeking an internship opportunity to gain practical experience and contribute to meaningful projects.

EDUCATION

University of Peradeniya

BSc.Eng(Hons.) in Computer Engineering

Mar 2021 – Present

CGPA: 3.30/4.00

J/Chavakachcheri Hindu College

GCE Advanced Level Examination - 2019

Jan 2011 – Aug 2019

Results: 3A , Z-Score: 2.1617

TECHNICAL SKILLS

Programming Languages Java, Python, C

Web Development HTML5, CSS, React.js, Spring Boot

Libraries Numpy, Pandas, Matplotlib, scikit-learn, OpenCV

Database MySQL

Cloud Platforms AWS (EC2,RDS) , Google Cloud

PROJECTS

Automated Hydroponics System | Group |

Nov 2023 - Jan 2024

- Developed an IoT-based Automated Hydroponics System with web and mobile applications for monitoring and controlling system conditions, as well as managing resources.
- Contributed to develop the backend system for both web and mobile applications, mainly focused on **user management, authentication , deployed the frontend and backend applications** in a cloud platform and managed data using a MySQL database on AWS RDS.
- Implemented a CI/CD pipeline using GitHub Actions, Docker, and AWS EC2 to automate the deployment process and ensure continuous integration and delivery.
- Technologies:** React.js, Spring Boot, Flutter, MySQL, JWT, AWS, Docker, GitHub actions, CI/CD pipelines
- Security practices:** Role based user authentication, Refresh tokens

Engineering Education Unit Web Application | Group |

Aug 2023 - Oct 2023

- A web application that combines robust security features with a responsive user interface and an exceptional user-friendly **editable admin page**.
- Contributed to develop both frontend and backend pages for admin and **deployed the web application in a Linux based server**.
- Technologies:** React.js, Spring Boot, MySQL, CSS, JWT
- Accessible on :** eeu.pdn.ac.lk

School Attendance Management System | Group |

Mar 2023 - Jun 2023

- A versatile and user-centric platform that enhances the school's attendance tracking and communication process.
- Contributed to designing the attendance marking page with automated email sending facilities.
- Technologies:** React.js, Spring Boot, MySQL, CSS

Library Management System | Group |

Mar 2023 - Jun 2023

- A robust and user-friendly solution to enhance the library's efficiency and improve the overall user experience.
- Contributed to developing the home page of the web application with features such as user authentication and book searching.
- **Technologies:** HTML5, CSS, PHP, MySQL

8 bit Single Cycle Processor | Group |

Mar 2023 - Jun 2023

- A 8-bit single-cycle CPU with an associated memory hierarchy, including an ALU, register files, control logic, forwarding unit, data memory, data cache, instruction memory, and instruction cache.
- **Technologies:** ARM, Verilog, C

VOLUNTEER PROJECTS

Predicting Inpatient Bed Demand with Machine Learning | Group |

Oct 2023 - Present

- We address the healthcare overcrowding problem by utilizing Machine Learning, aiming to optimize resource planning in the Emergency Department and Post-Anesthesia Care unit for enhanced efficiency and improved patient care.
- Contributed to dealing with categorical data and created a new dataset using the existing time series data for training the models.
- **Techniques:** K-Means Clustering, Support Vector Regression

ACHIEVEMENTS

Hackfest | Champions | Sustainable Ecosystems Category

2023

48 Hour inter-university Hackathon

University of Peradeniya


ACES Coders v10.0 | Participant

2023

12 Hour competitive programming competition

University of Peradeniya

CERTIFICATIONS

Supervised Machine Learning: Regression and Classification 

DeepLearning.AI

Advanced Learning Algorithms 

DeepLearning.AI

Foundations of Project Management 

Google

Introduction to Artificial Intelligence 

Indonesia Cyber Education Institute

Computer Networks 

Indonesia Cyber Education Institute

COMMUNITY INVOLVEMENT

Blog Writer, Medium **M**

Jan 2024 - Present

Executive committee member, ACES, University of Peradeniya

Jan 2024 - Present

Web Development Team, Hacker's Club, University of Peradeniya

Jan 2024 - Present

REFERENCES

Prof. Roshan G. Ragel | roshanr@eng.pdn.ac.lk

Professor and Head, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

Dr. Isuru Nawinne | isurunawinne@eng.pdn.ac.lk

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