Danujan Sivasundaralingam

Department of Computer Engineering, University of Peradeniya

📞 +94 768312407 ✉ danujan06@gmail.com in danujan-sivasundaralingam ○ Danujan06 🌐 danujan06.github.io

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   **Mar 2021 – Present**
BSc.Eng(Hons.) in Computer Engineering   CGPA: 3.30/4.00

J/Chavakachcheri Hindu College   **Jan 2011 – Aug 2019**
GCE Advanced Level Examination - 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, 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 Writter, 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