DANUJAN SIVASUNDARALINGAM

Department of Computer Engineering, University of Peradeniya

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

PROFILE

A passionate 3rd year Computer Engineering undergraduate with a focus on **Machine Learning**, **Data Science**, **Web Development**, and **DevOps**, 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   Results: 3A , Z-Score: 2.1617

ACHIEVEMENTS

Hackfest — Champions — Sustainable Ecosystems Category   **2023**
48 Hour inter-university Hackathon   University of Peradeniya

ACES Coders v10.0 — Participants   **2023**
12 Hour competitive programming competition   University of Peradeniya

TECHNICAL SKILLS

Languages	Python, Java, C, HTML5, CSS, SQL
Frameworks	React.js, Spring
Libraries	Numpy, Pandas, Matplotlib,scikit-learn, Seaborn
Cloud Platforms	AWS (EC2,RDS) , Google Cloud
Testing	Junit, Mockito Framework

PROJECTS

Automated Hydroponics System 🌐 ⭘   **Nov 2023 - Jan 2024**

- Developed an IoT-based 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** and **deployed the front end and back end applications in the cloud platform.**
- **Technologies**: React.js, Spring Boot, Flutter, MySQL, JWT, Junit, Mockito, AWS, Docker, GitHub actions, CI/CD pipelines
- **Security practices**: Role based user authentication, Refresh tokens

Engineering Education Unit Web Application 🌐 ⭘   **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 an both frontend and backend pages for admin and **deployed the application in the Linux based server.**
- **Technologies**: React.js, Spring Boot, MySQL, CSS, JWT
- **Accessible on** : eeu.pdn.ac.lk

Crop Recommendation System ⊙   **Apr 2024 - Present**

- A ML based recommendation system to assist farmers in selecting the most suitable crops for their land based on various soil and climatic factors.
- **Technologies**: Python, scikit-learn, Matplotlib, Seaborn, numpy, pandas

Library Management System ⊕ ⊙   **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

School Attendance Management System ⊕ ⊙   **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

8 bit Single Cycle Processor ⊙   **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

Machine learning based forecast for inpatient bed demand prediction— 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.
- **Techniques**: K-Means Clustering, Support Vector Regression

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
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