PASINDU RANGANA RANAGE

Computer Engineering Undergraduate, University of Peradeniya

✉ pasindurangana1@gmail.com | 📱 +94 76 835 7810

in linkedin.com/in/pasindu-rangana | ⭕ github.com/PasinduRR

EDUCATION

University of Peradeniya — Peradeniya, Sri Lanka
B.Sc. Engineering (Hons.) in Computer Engineering; GPA: 3.6/4.0 (Transcript ⬀) — *March 2021 - Present*
- Linear Algebra, Machine Learning, Image Processing, Data Structures and Algorithms, Signal Processing, Operating Systems, Database Systems, Communication Networks

Bandaranayake College — Gampaha, Sri Lanka
GCE Advanced Level - Physical Science Stream; Z-Score 2.1236 — *Jan 2011 - Aug 2019*
- District Rank: 51, Island Rank: 575
- Combined Mathematics, Physics, Chemistry

National Institute of Business Management (NIBM) — Colombo, Sri Lanka
Diploma in Network Engineering — *October 2019 - December 2020*
- Computer Architecture, Routing & Switching Essentials, Connecting Networks, Data Communication and Computer Networks, Web Application Development

EXPERIENCE

Data Science Intern | *LIRNEasia* — June 2024 - Dec 2024

Supported data analysis and predictive modeling tasks, gaining practical experience in applying data science techniques to real-world challenges.

Casual Instructor | *Department of Computer Engineering, University of Peradeniya* — March 2024 - August 2024

Supervised 2hr long weekly lab sessions based on programming an ATmega328P micro controller in C language

COMPETITIONS

ACES Coders v10.0 | 27th Place — *2023*

An inter-university 12-hours over night coding competition organized by the Association of Computer Engineering Students, University of Peradeniya.

ACES Hackathon 2023 | 1st Place — *2023*

An two-day intra-university hackathon competition organized by Association of Computer Engineering Students, University of Peradeniya.

PROJECTS

Mixture-of-Experts and Multi-agent Framework for Legal Assistance | Group — *Jan 2025 - Present*
- An AI-powered Legal Chain Resolver leveraging Mixture-of-Experts and multi-agent framework to deliver personalized legal guidance, simplifying navigation through statutes, precedents, and regulations.

Heart Disease Prediction System | Group ⭕ — *March 2024 - May 2024*
- A machine learning-based diagnostic model for early detection and accurate classification of heart disease in patients.
- Contribution: Analysing and preprocessing the dataset, Training and evaluating the logistic regression model
- Technologies: Python, Numpy, Pandas, scikit-learn

Smart Billing System for Self-Checkout Supermarkets | Group ⭕ — *Nov 2023 - Jan 2024*
- An IoT system merges image processing for item identification with an automated weight checker for precise item weight recognition, culminating in a seamless self-checkout system.
- Contribution: Overall JavaFX app integration with all functionalities, UI design for the web application
- Technologies: React, MongoDB, ExpressJS, Python, OpenCV, Keras, MQTT, AWS, JAVA, JavaFX, C++

TecHub Help Desk Ticketing System | Group ⭕ — *Aug 2023 - Oct 2023*
- A web application was implemented for the help desk ticketing system for the repair center within the IT Center at the University of Peradeniya.
- Contribution: UI design for the web application, Integration of the backend with the frontend.
- Technologies: PHP, HTML, Bootstrap, Figma, MySQL, CSS, Javascript

FlightNav Pro Flight Management System | Group ⭕ — *March 2023 - July 2023*
- A web application was developed for a comprehensive flight management system, offering features like flight search, ticket booking, user account management, and an admin dashboard with financial reports.
- Contribution: Implementing the database, Integrating the backend with frontend, UI design
- Technologies: HTML, PHP, CSS, MySQL

InCarePro Inpatient Hospital Management System | Group ⌂ *March 2023 - July 2023*
- A mobile app for a patient management system to automate tasks such as report generation and admission management, ensuring a user-friendly experience for both patients and hospital staff.
- Contribution: UI design, Frontend development
- Technologies: Java, Firebase, Android Studio, Adobe XD

LEADERSHIP EXPERIENCE

Association of Computer Engineering Students (ACES) - University of Peradeniya
Vice President *Dec 2024 - Present*
- Assisted in managing events, workshops, and collaborations while fostering teamwork and effective communication within the club.
- Led meetings, supported subcommittee activities, and ensured alignment with the club's goals.

Rotaract Club of University of Peradeniya
President *July 2023 - July 2024*
- Ensured Rotary compliance while aligning club activities with goals through strategic planning.
- Provided strong leadership, fostering a supportive environment for growth for the members.
- Led successful community service events, ensuring alignment with club goals and outcomes.

Director of Public Relations *July 2022 - July 2023*
- Utilized digital marketing and social media to engage stakeholders and drive club participation.
- Won the Gold Award for The Best PR effort for the Rotary year 2022-23 at 33rd Rotaract District Assembly.

Department of Computer Engineering - University of Peradeniya
Student Representative *Sept 2022 - Nov 2023*
- Leading the students in organizing department events.
- Facilitate effective communication between students and the staff.

Engineering Students' Publication Society - University of Peradeniya
Vice President *Dec 2024 - Present*
- Supported the President in strategic planning and ensuring smooth execution of publication initiatives and events.
- Supervised subcommittees, coordinated content publication, and represented the society at events.

Webmaster *Oct 2023 - Dec 2024*
- Developed and maintained the society's website, ensuring usability and updating content regularly.
- Maintained social media pages of the society.

Assistant Secretary *Oct 2022 - Oct 2023*
- Helping the Secretary to maintain records and administration
- Handled incoming and outgoing correspondence, including emails and letters, on behalf of the organization.

IEEE Student Branch - University of Peradeniya
Marketing Team Member *April 2023 - Present*
- Contributed to the marketing efforts, promoting events, initiatives, and membership opportunities.

IET on Campus - University of Peradeniya
Committee Member *Jan 2023 - May 2024*
- Contributed to planning and executing events for IET on Campus, including workshops, seminars, and conferences.

perabeats - University Media Club
Crew Member *Feb 2023 - Present*
- Contributed in photography and graphic designing for events and activities within the university community.

Bandaranayake College Photographic Art Society
President *Dec 2017 - Nov 2018*
- Led club activities, organized events, managed finances, and promoted photography among students.

SKILLS SUMMARY

Languages: English (professional proficiency), Sinhala (native proficiency)
Programming Languages: Python, C, Matlab, Java, HTML, PHP, Javascript
Database and Cloud: MySQL, FireBase , MongoDB, PostgreSQL
Libraries and Frameworks: OpenCV, Numpy, Matplotlib, Pandas, JavaFX, scikit-learn
Designing: Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Adobe Illustrator

REFERENCES

Prof. Roshan Ragel
Head of the Department of Computer Engineering
Faculty of Engineering, University of Peradeniya
Email: roshanr@eng.pdn.ac.lk
Telephone: +94 77 385 7755

Dr. Isuru Nawinne
Senior Lecturer, Department of Computer Engineering
Faculty of Engineering, University of Peradeniya
Email: isurunawinne@eng.pdn.ac.lk
Telephone: +94 77 966 7468