VILAKSHAN VINASIRAJAN

Education

University of Peradeniya BSc Computer Engineering (3.8/4.0)

Dec 2019 - Current

• Courses: OOP, Data Structure & Algorithm, Machine Learning, Software Engineering, Database Systems, Operating System, Networking, Embedded System

Diploma in Management Accounting - CIMA

2019

Skills

Languages: Python, Java, C, Dart

Back End Development: Node.js, Firebase

Mobile App Development: Flutter

Databases & Cloud Services: Cloud Firestore, MySQL, AWS (Beginner Level), Firebase Functions

Other: Linux, ARM, MQTT, Docker, CI/CD, DevOps (Beginner Level)

Soft Skill: Problem-solving, Leadership, Teamwork, Effective Communication

Collaborative Projects

Pegas: Smart Gas Monitoring System 🖸

2023

- Monitors gas levels and detects gas leaks using sensors
- App allows users to monitor gas levels and receive alerts for gas leaks [Flutter, Firebase, Embedded System, C]

EagleEye: Unleashing Real-Time Remote Monitoring O

202

• Captures real-time video from an onion storage and seamlessly displays it to the user through a dashboard app. IArduino, Flutter web, MQTT, CI

(current)

- · Maintains a temperature and Humidity within the level
- Won ACES Hackathon 2023

Supervised Machine Learning: ILinear Regression, Decision Tree, Forest, XGBoostl

Individual Projects

WSAP - Tool Kit for WhatsApp

2021

- Enables users to create and share polls, save WhatsApp statuses, and split videos for direct status sharing.
- · Have 500+ downloads on Google Play.

[Flutter, Firebase]

Sri Lankan Shipping Rate 🗘 🔗

2023

- · Assist direct shipping businesses in calculating shipping rates.
- Have 1000+ impressions

[Flutter Web, Firebase, Google Search Console, CI/CD]

GOOGLE SCHOLOR WEB SCRAPE BOT

2023

• Obtain the usernames, citation counts, and links to the Google Scholar profiles of university staff members. [Python, Selenium]

Lankan Assist : An app for All Srilankan

2021

- Offers a diverse range of functionalities including real-time Sri Lankan news sourced from Twitter, railway schedule information, and various other features.
- Have 1000+ downloads on <u>Google Play</u>.

[Flutter, Firebase]

STUDENT RESULTS MANAGEMENT SYSTEM O

2021

2021

• An app for undergrads to analyze their results without the involvement of supervisors or lecturers. *LJAVA, Android Studio, Firebasel*

DIGITAL CLOCK ()

• displays the current time and date on a Linux terminal, mimicking the appearance of a digital clock with the appropriate format and font.

 $\{C\}$

BUILDING AN 8-BIT SINGLE CYCLE COMPUTER PROCESSOR- RISC V ()

2021

• An 8- bit single cycle processor with an ALU, register file, control logic, data memory, data cache, instruction memory and instruction cache. A memory hierarchy was built too.

[ARM]

Contributions to Open Projects within University Teams

Improving Deep Learning Workflow

• Configure Singularity on a Linux server and execute PyTorch containers from Docker Hub using Singularity images. [Linux]

University Web Development Team

Research on Impact Ranking

Achievement

ACES HACKATHON (2023)

- Title winners under Sustainable category
- Demonstrated Smart Green House Project

ACES CODERS V 9.0

- National-wide problem-solving hackathon
- · 26th place out of 100 Teams

References

Roshan G. Ragel BSc-Eng, PhD

Professor and Head I Computer Engineering I University of Peradeniya roshanr@eng.pdn.ac.lk Dr. Eng. Kamalanath Samarakoon Phd Senior Lecturer of the Department Computer Engineering. kamalanath@eng.pdn.ac.lk