# Sashini Liynage

#### **EDUCATION**

University of Peradeniya

Nov. 2018 – present

Third year undergraduate in Computer Engineering (BSc. Engineering (Hons.))

cGPA: 3.88/4.00

Pushpadana Girls College, Kandy

2015 - 2017

G.C.E Advanced Level Examination

Provincial Rank - 05/2784

Physics(A), Chemistry(A), Combine Mathematics(A)

National Rank - 80/32075

## TECHNICAL SKILLS

Programming Languages: Python, Javascript, Java, C, Verilog HDL, ARM assembly

Web Development: HTML5, CSS, Bootstrap, ReactJS, ElectonJS, NPM

Database Systems: MongoDB

Graphics Editing: Adobe Illustrator

#### RELEVANT COURSEWORK

Software Construction Database Systems Software Engineering Image Processing

Machine Learning Communication Network Operating Systems Computer Architecture

#### **PROJECTS**

Remote Proctoring Device — Group — 👩 💪

July 2021

A single device which integrates the hardware and software components needed to conduct an examination in online mode with no technical interruption.

Technologies: ReactJS, ElectronJs, Nodejs, MongoDB, Rest API, AWS

Contribution: Desktop app development, Hardware design

Oral Cavity Region Detection System — Group — 🕠 💪

Jan 2022

A web-based tool to segment the known normal regions of the oral cavity. Sub project of oral cancer detection

Technologies: ReactJS, Nodejs, MongoDB, Rest API, Keras, Tensorflow, Tensorflow, is

Contribution: Web app development, Backend development, Python server

Reconstructing highly degraded license plates — Group — 🔉 🕻

2022

A procedure to extract a number plate from an image and reduce several noises due to low resolution, high or low lighting, and motion blur to reconstruct highly degraded images of license plates.

Technologies: Python, OpenCV, EasyOCR

Techniques: Spatial and Frequency domain filtering and Degradation modeling

Compiler for COOL — Group — 🞧

2022

Implement a lexical analyzer, parser, semantic analyzer, and code generator to compile programs written in the COOL: Classroom Object-Oriented Language.

Technologies: C++

Techniques: Abstract Syntax Trees, Flex and Bison, MIPS assembly.

Multi-threaded chat server — Individual — 👩

2022

A chat server that will accept connections from clients and would let clients send in strings over the network using multi-threads in Java.

Technologies: Java

Techniques: Multi-threading, Synchronization Primitives

## 8-bit single cycle processor — Group — 👩

2021

Implement a simple 8-bit single-cycle processor which includes an CPU with data memory unit and data cache using Verilog HDL

Technologies: Verilog-HDL

#### ACHIEVEMENTS

Hacktitude 2022

An inter-university hackathon organized by the company 99x

Rank -32 (Out of 200+ teams)

Hackfest 2022

An inter-university hackathon organized by the University of Peradeniya

Rank – 1 (Healthcare category) (Out of top 20 teams)

ACES Coders v8.0 2019

An inter-university 12-hours coding competition organized by University of Peradeniya.

Rank – 43 (Out of top 120 teams)

## TEACHING EXPERIENCE

Casual instructor Nov 2021 - March 2022

CO224 Computer Architecture - Department of Computer Engineering

#### Volunteer teacher - Nanathambara 2022

March 2022

Webinar series on Arduino and python programming for school students organized by ACES University of Peradeniya

## **EXTRACURRICULAR**

## Member of the Rotaract club of university of Peradeniya

2019 - present

Project NextStep360 organizing committee member

Digital Media team member

## Member of Design Team of ACES and Hackers' Club

2022

Member of the Dramatic Society of the University of Peradeniya

 ${\rm Dec}~2019$  -  ${\rm present}$ 

## REFERENCES

## Prof. Roshan G. Ragel — roshanr@eng.pdn.ac.lk

Head of Department, 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