



ISURI DEVINDI

[Department of Computer Engineering, University of Peradeniya, Sri Lanka](#)

+94713713686 | gaisuridevindi@gmail.com | isuridevindi.github.io

github.com/isuridevindi | [Syncfusion blog](#) | isuridevindi.medium.com

ACHIEVEMENTS

IEEEExtreme 14.0

2020

24 hour global algorithmic programming competition
Country Rank - 68, Global Rank - 724
(Out of 2000+ teams)

Hacktitude

2022

Inter-university hackathon organized by 99x
Rank - 32 (Out of 200+ teams)

Hackfest

2022

Inter-university hackathon organized by ACES,
University of Peradeniya
Rank (Healthcare category) - 1 (Out of top 20 teams)

Hackdown

2019

Inter-university coding competition organized by
IEEE WIE Student branch of University of Moratuwa
Rank - 37 (Out of 100+ teams)

ABOUT ME

I am a 3rd year computer engineering undergraduate, interested in **all phases of software development** from UI/UX designing to database management, and also **computer vision** and **machine learning**. I am currently seeking internship opportunities to enhance my skills.

EDUCATION

University of Peradeniya

2018 Nov - Present

BSc.Eng(Hons.) in Computer Engineering
Field Rank - **1 / 60**, Batch Rank - **1 / 415**

GPA - **4.00 / 4.00**

Hillwood College, Kandy

2004 - 2017

G.C.E. Advanced Level Examination
District Rank - **6 / 2784**, National Rank - **113 / 32075**

Z-Score: **2.2768**

CIMA Certificate level completion

2018

Fit-in-Deutsch 2

2014

Passed with 73 marks (out of 80)

TECHNICAL SKILLS

Languages

Python, C/C++, Java, JavaScript, HTML/CSS, SQL, Verilog HDL, ARM Assembly Language

Frameworks

React.js, Express.js

Libraries

TensorFlow, Keras, OpenCV, NumPy, Matplotlib, pandas

PROJECTS

Oral cavity region detection system | Group |

2022 - Present

- A web-based application that can be used to upload images of an oral cavity and segment the anatomical structures present in the image using a machine learning model.
- Contribution: Exploring the potential of U-Net and Mask R-CNN models in developing a machine learning solution to segment the oral cavity images.
- Technology: TensorFlow, Keras, React.js, Express.js, MongoDB, Node.js
- Techniques: **U-Net**, **Mask R-CNN**

Reconstructing highly degraded license plates | Group |

2022

- Demonstration of the efficacy of traditional image processing techniques to reconstruct highly degraded images of license plates obtained from CCTV footage, when the source of degradation is unknown.
- Technology: Python, OpenCV, EasyOCR
- Techniques: **Otsu thresholding**, **Morphological transformation**, **Contouring**, **Spatial and Frequency domain filtering** and **Degradation modeling(Wiener Filter)**

Remote proctoring system | Group |

2021 - Present

- A single device with video streaming facility which integrates the hardware and software components needed to conduct virtual proctoring of an examination in a university.
- Contribution: Designing a scalable web application for administrators of the university and proctors of examinations. Developing the hardware solution for the device using Raspberry Pi micro-controller.
- Technology: React.js, Express.js, MongoDB, Node.js
- Techniques: Handling and **synchronization** of API requests & responses with promised-based library **Axios**.

Compiler for COOL Language | Group |

2022

- The combination of a lexer, parser, semantic analyzer, and code generator that can be used to compile programs written in the COOL programming language.
- Technology: C++
- Techniques: Utilization of concepts such as **Finite State Machines**, **Abstract Syntax Trees** and tools such as **Flex** and **Bison**, to convert COOL to MIPS assembly language

Database system for business to business trade | Group |

2020

- A fully functional database to organize transactions between businesses with a user-friendly interface.
- Contribution: Developing the database
- Technology: MySQL, PHP, Django

Tool to generate and display fractals | Individual |

2020

- A tool to display two fractal sets: Mandelbrot and Julia set, according to user preferences.
- Technology: Java
- Techniques: **Multi-threading**, **Synchronization Primitives**

8-bit single cycle processor | Group |

2020

- An 8-bit single cycle CPU with associated memory hierarchy. The processor includes an ALU, register files, control logic, forwarding unit, data memory, data cache, instruction memory and instruction cache.
- Technology: Verilog-HDL
- Techniques: **RISC-V**, **Caching**

EXPERIENCE

Technical article writer

2021 Feb - Present

[Medium blog](#) | [Syncfusion blog](#) | [Enlear Pvt. Ltd.](#)

Casual Instructor

Department of Computer Engineering, University of Peradeniya

CO322: Data Structures and Algorithms

2022 Oct- Present

Supervising weekly 2hr long lab sessions, preparing tutorials related to data structures and algorithms.

CO253: Introduction to Programming and Networking

2021 Nov- 2022 Jan

Supervised weekly 2hr long online lab sessions based on C programming Language.

CO222: Programming Methodology

2021 May- 2021 Sep

Supervised weekly 2hr long online lab sessions, created questions for online quizzes based on the C programming Language.

EXTRA-CURRICULAR ACTIVITIES & LEADERSHIPS HELD

Member of the Web Consultation team of University of Peradeniya

2020 - Present

Secretary in IET on Campus of the University of Peradeniya

2022 - Present

President of the Music Society of the University of Peradeniya

2022 - 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 Lecture,

Department of Computer Engineering,

Faculty of Engineering,

University of Peradeniya,

Sri Lanka.