RAVISHA RUPASINGHE

COMPUTER ENGINEERING UNDERGRADUATE



+94766995590



ravisha98rupasinghe@gmail.com



Department of Computer Engineering, University of Peradeniya, Sri Lanka



ravisha-rupasinghe



RavishaHR



Portfolio

Third-year undergraduate experienced with all stages of the development cycle for dynamic web projects. Shows a strong interest in areas related to Machine Learning. Currently seeking for an internship opportunity to widen the scope of knowledge in the interested areas and to obtain more hands-on experience.

EDUCATION

UNIVERSITY OF PERADENIYA

Bachelor of Science in Computer Engineering. Currently maintains a GPA of **3.94**.

November 2018 - Present

VISAKHA VIDYALAYA

Achieved results: Combined Mathematics (A), Physics (B) and Chemistry (B) (Medium - English).

2009 - 2017

TECHNICAL SKILLS

- Languages: Python, Java, C, HTML/CSS, JavaScript, SQL
- Developer Tools: VS Code, Azure, Google Cloud Platform, AWS, Git, Postman, Docker
- **Technologies/Frameworks:** Bash scripting/Linux system administration, React, React Native, GitHub, Express, Bootstrap, Maven

RELEVANT COURSEWORK

- Machine Learning and Data Mining
- Computer Architecture
- Artificial Intelligence
- Database Management
- Data Structures and Algorithms
- Network and Web Application Design
- Software Methodology
- Compilers

- Operating Systems
- Embedded Systems
- Electronics
- Computer Communication Networks

EXPERIENCE

TEACHING ASSISTANT

University of Peradeniya

June - October 2021

- Conducted lessons in Python Programming and development using Arduino in the course GP106, offered by the Computer Department for the First-Year Undergraduates of the University of Peradeniya.
- Was responsible for 35 students and assisted them with their lab coursework for a period of one semester.

EXTRACURRICULAR ACTIVITIES

THE CEYLON UNIVERSITY DRAMATIC SOCIETY OF THE UNIVERSITY OF PERADENIYA

Member

PROJECTS

QUICKPARK - AN E-PARKING SYSTEM

Javascript, Node.js, AWS, React/React Native, MongoDB

July - October 2021

ANALYTICAL SOFTWARE FOR NEXT GENERATION SKIM SEQUENCING DATA

Java, Maven, Linux

February 2022 - Present

A COMPILER FOR COOL PROGRAMMING LANGUAGE

C++

January 2022 - April 2022

A SOFTWARE TO PLOT FRACTALS

Java

November 2020 - December 2020

A SIMPLE 8-BIT SINGLE-CYCLE PROCESSOR

Verilog HDL

July 2020 - October 2020

- Cyber-physical systems project to design and implement an E-parking system including hardware nodes, a mobile app and a management portal.
- **Skills developed:** Database design, UI design, embedded systems design, data structures and algorithms, cybersecurity concepts, quality assurance testing.
- Visit the project page, and the GitHub repository.
- A complete toolkit that incorporates the existing ITS, Mitochondria and Chloroplast sequencing pipelines, and integrates them together in a GUI environment.
- **Skills developed:** Frameworks (Maven), software development, OS aspects, Natural Language Processing.
- Visit the <u>project page</u> and the <u>GitHub repository</u>.
- Compiler implementation for the COOL programming language from scratch, developed for the CO521 -Compilers course.
- **Skills developed:** Structure and design of a compiler.
- Design and implementation of a software that plots two of the most popular fractals: Mandelbrot set and Julia set.
- Skills developed: OOP concepts in Java.
- Visit the GitHub repository.
- Design and implementation of a simple 8-bit single-cycle processor which includes an ALU, a register file and control logic, using Verilog HDL.
- **Skills developed:** Flow of data and instructions in a processor, memory sub-systems.

ACHIEVEMENTS

HACKTITUDE BY 99X

January 2022

IEEE WIE HACKDOWN

April 2020

37th place as a team

Based on technologies such as Node.js/Express, EJS, Javascript and SQLServer.

35th place as a team

Participated in the competition organized by University of Moratuwa as a team of two.

REFERENCES

DR. ISURU NAWINNE

isurunawinne@eng.pdn.ac.lk

Senior Lecturer, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

DR. ASITHA BANDARANAYAKE

asithab@eng.pdn.ac.lk

Senior Lecturer, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka