# RAVISHA RUPASINGHE

Department of Computer Engineering, University of Peradeniya, Sri Lanka

→ +94766995590 ravisha98rupasinghe@gmail.com ravisha-rupasinghe

🗅 RavishaHR 😄 Portfolio

# **PROFILE**

Third-year undergraduate from the Department of Computer Engineering of University of Peradeniya. Experienced with all stages of the development cycle for dynamic web projects. Shows a strong interest in areas related to Machine Learning and UI/UX in web interface development. 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

Peradeniya, Sri Lanka

Visakha Vidyalaya

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

**2009 - 2017** Colombo 05, Sri Lanka

# **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**

# **University of Peradeniya**

Teaching Assistant

**june – October 2021** 

Peradeniya, Sri Lanka

- Conducted lessons related to 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.

# **PROJECTS**

**QuickPark - An E-Parking System** | *Javascript, Node.js, AWS, React/React Native, MongoDB* 

**july - October 2021** 

- The goal of this third-year cyber-physical systems project was to design and implement an E-parking system which includes several hardware nodes, a mobile app for the users and a management portal for the car park owners.
- Techniques and skills developed: Database designing and development, UI designing, embedded systems designing, proper usage of data structures and algorithms, application of cybersecurity concepts, quality assurance testing.
- Visit the project page, the GitHub repository or the project presentation.

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- An open-source package that incorporates the existing ITS, Mitochondria and Chloroplast sequencing pipelines, and integrates them together in a GUI environment to produce a complete toolkit.
- **Techniques and skills developed:** Using frameworks such as Maven, software development, considering OS aspects, Natural Language Processing.
- Visit the project page, the GitHub repository or the project presentation.

#### A compiler for COOL programming language | C++

**i** January 2022 - April 2022

- Compiler implementation for the COOL programming language from scratch, developed for the CO521 -Compilers course.
- **Techniques and skills developed:** Structure and design of a compiler.

#### A software to plot fractals | Java

November 2020 - December 2020

- Design and implementation of a software that plots two of the most popular fractals: Mandelbrot set and Julia set.
- Techniques and skills developed: OOP concepts in Java.
- · Visit the GitHub repository.

# A simple 8-bit single-cycle processor | Verilog HDL

**i** July 2020 - October 2020

- Design and implementation of a simple 8-bit single-cycle processor which includes an ALU, a register file and control logic, using Verilog HDL.
- **Techniques and skills developed:** Flow of data and instructions in a processor, memory sub-systems.

### **ACHIEVEMENTS**

Hacktitude by 99x

ighthalfallianian in January 2022

37th place as a team

- The competition was based on developing backend and frontend systems.
- Based on technologies such as Node.js/Express, EJS, Javascript and SQLServer.
- Achieved 37th place out of 200 participant teams.

#### **IEEE WIE Hackdown**

**April 2020** 

35th place as a team

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

#### **EXTRACURRICULAR ACTIVITIES**

# The Ceylon University Dramatic Society of the University of Peradeniya

**=** 2019

Member

#### 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