

RAVISHA RUPASINGHE



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Department of Computer Engineering,
University of Peradeniya, Sri Lanka



[ravisha-rupasinghe](#)



[RavishaHR](#)



[Portfolio](#) | [CN ePortfolio](#)

Final-year undergraduate experienced with all stages of the development cycle for dynamic web projects. Strong interest in areas related to Machine Learning and Data Science. Currently searching for a job 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 Engineering Honours
degree in Computer Engineering.

Currently maintains a GPA of **3.92**.

November 2018 - Present

VISAKHA VIDYALAYA

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

2009 - 2017

TECHNICAL SKILLS

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

RELEVANT COURSEWORK

- Machine Learning and Data Mining
- Data Structures and Algorithms
- Computer Communication Networks
- Neural Networks and Fuzzy Systems
- Network and Web Application Design
- Database Management
- Artificial Intelligence
- Software Architecture
- Embedded Systems
- Computer Architecture

EXPERIENCE

DATA SCIENTIST INTERN

OCTAVE by John Keells Holdings PLC

December 2022 - May 2023

- Interned at OCTAVE as a Data Scientist in the Ceylon Cold Stores Team while contributing to two use cases regarding the distribution of Ice Cream products.
- Gained experience in utilizing PySpark, Azure DevOps, Databricks, and Git. Developed skills in Machine Learning, Data Validation, Supervised and Unsupervised Learning, Model Evaluation, and Exploratory Data Analysis.

TEACHING ASSISTANT

University of Peradeniya

June 2021 - July 2023

- Conducted lessons in Python Programming and development using Arduino in the course GP106, offered by the Computer Department for First-Year Undergraduates.
- Assisted practical lab sessions for Third-Year undergraduates for courses CO323: Networking, CO325: Computer and Network Security, and CO326: Industrial Networks.

PROJECTS

- **INVESTIGATING THE BARRIERS TO ENHANCE HUMAN-ML COLLABORATION**
Python, LIME, SHAP
May 2023 - Present
 - Final year research project that studies the correlations among model predictions and the disagreement among different XAI (Explainable Machine Learning) methods to improve model performance.
 - **Skills developed:** Data preparation, Feature Engineering techniques, model evaluation, XAI methods.
 - [Project page](#) and the [GitHub repository](#).
- **QUICKPARK - AN E-PARKING SYSTEM**
Javascript, Node.js, AWS, React/React Native, MongoDB
July - October 2021
 - 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, and software quality assurance.
 - [Project page](#) and the [GitHub repository](#).
- **ANALYTICAL SOFTWARE FOR NEXT GENERATION SKIM SEQUENCING DATA**
Java, Maven, Linux
February 2022 - Present
 - 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 (Operating Systems) aspects.
 - [Project page](#) and the [GitHub repository](#).

ACHIEVEMENTS

HACKTITUDE BY 99X

37th place as a team

January 2022

IEEE WIE HACKDOWN

35th place as a team

April 2020

PUBLICATIONS

AN ALTERNATIVE LABELLING STRATEGY TO IMPROVE SUPERVISED LEARNING FOR DONATION-BASED CROWDFUNDING

Submitted to the Sri Lanka Student Workshop on Computer Science in 2023.

ORGANIZATIONS AND EXTRACURRICULAR ACTIVITIES

THE CEYLON UNIVERSITY DRAMATIC SOCIETY OF UOP

Member

THE INSTITUTE OF ENGINEERS SRI LANKA

Student Member

ASSOCIATION OF COMPUTER ENGINEERING, UNIVERSITY OF PERADENIYA

Member

REFERENCES

DR. ISURU NAWINNE

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