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OVERVIEW

Computer Engineering grad and MSc candidate in Data Science and AI, with a blend of software engineering experience and applied research in large language models. Currently a Data Science Researcher, exploring how AI can advance social good and ethical technology. Experienced in building data pipelines, experimenting with state-of-the-art LLMs, and developing AI-assisted tools for low-resource language contexts. Former Software Engineer in fintech, with strong foundations in backend development, Python, and scalable system design. Passionate about creating trustworthy and impactful AI systems that bridge innovation and real-world benefit.

EDUCATION

University of Moratuwa <i>Master of the Science in Data Science & Artificial Intelligence – Expected Graduation - Dec 2026</i>	Jan 2025 – present Colombo, Sri Lanka
University of Peradeniya <i>Bachelor of the Science of Engineering Honours in Computer Engineering – CGPA: 3.6</i>	Dec 2018 – Dec 2023 Kandy, Sri Lanka
St. Anthony's College, Kandy <i>G.C.E A/L - Physical Science – Z-Score: 2.4058 : District Rank (Kandy): 3rd & Country Rank: 55th</i>	Feb 2009 – Aug 2017 Kandy, Sri Lanka

RESEARCH WORK AND PROJECTS

AI-assisted Ethical Language Compliance using Large Language Models <i>Python, LLM, RAG, AI Evals</i>	Aug 2025 - present
<ul style="list-style-type: none">Develop dashboard and editor tool integrated with RAG system for ethical journalismIterative evaluation and Prompt engineering for LLM system to refine compliance check output.	
Empirical Evaluation of LLM Systems in Fact-checking <i>Python, LLM, Hugging Face</i>	July 2025 - present
<ul style="list-style-type: none">Develop informed research pipeline for factchecking task employing SOTA LLMs and RAG strategies	
Explainable Predictive Pipeline for Project Risk Identification in DonorsChoose <i>Python, ML, XAI</i>	2023 - 2024
<ul style="list-style-type: none">Developed ML pipeline for data processing, feature engineering, and training.Utilized Explainable AI to analyze predictions and resolve disagreements in XAI method explanations.	
Research on Alternative Labelling Strategy to Improve Supervised ML <i>Python, Pandas</i>	Accepted SLSWCS 2023
<ul style="list-style-type: none">Applied data engineering for data collection, labeling with diverse data sources with label agreement analysis.	
DreamSave Insights API <i>Python, Flask, Pydantic, Pyspark, MongoDB, Power BI</i>	Dec 2022 - June 2023
<ul style="list-style-type: none">Developed API features & optimized queries for data query and insights service provider backend.	
Smart Inventory System <i>Laravel, Vue Js, MySQL, Electron, Raspberry Pi, MQTT</i>	May 2021 - Sept 2021
<ul style="list-style-type: none">Developed a smart inventory management system and designed interactive KIOSK app.	
B2B supply chain system <i>Python, Django, MySQL, Bootstrap</i>	Sept 2020
<ul style="list-style-type: none">Implemented a web app & a RDBMS to handle multiple business inventory and orders	

EXPERIENCE

LIRNEasia <i>Data Science Researcher</i>	July 2025 – present Data, Algorithm & Policy Team
<ul style="list-style-type: none">Lead the design of an AI-assisted ethics monitor to support journalists and improve ethical compliance - AI EvalsDevelop and optimize data pipelines and LLM-based workflows for projects addressing misinformation in low-resource language contexts - LLM, RAGConduct data analysis on virality patterns in X using ML and statistical techniques - Pandas, Scikit LearnDevelop organizational policies for internal data management and technical research practices	
Enactor Limited <i>Software Engineer</i>	Jan 2024 – June 2025 Enactor Platform & Leroy Merlin Italy Dev Team
<ul style="list-style-type: none">Improved team's development and test workflow speed by 8 times using containerization techniques - DockerDesign and implement customized features for customer requirements - Javascript, React, POS systemInvestigate and convert of SOAP services to REST API - Java, Enactor tools, Jenkins	
Edith Cowan College, Australian College of Business and Technology, Sri Lanka <i>Visiting Lecturer - Python & Engineering Foundations</i>	Jun 2024 – Jan 2025 Diploma of Science (Computing/IT)
<ul style="list-style-type: none">Conducting in-person lectures for Programming Principles in Python & Introduction to Engineering courses.	

Calcey Technologies PVT LTD

Dec 2022 – June 2023

Intern Software Engineer - Python Backend

Dream Start Labs Project - DreamSave Insights API

- Develop, maintain and optimise API features with flask framework with software engineering best practices.

Department of Computer Engineering, UoP

Dec 2022 – present

Team Leader

PeraCom Seminar Organizing Committee

- Setting up seminar standards and communicate to organize the seminar.
- Networking with academia and industry experts.

AIIESEC in Kandy

February 2020 – December 2021

Team Leader

Incoming Global Teacher/ Talent

- Pitched business proposals and products for schools and companies in Sri Lanka based on monthly target.
- Signed partnerships with Sun British College, Vavuniya for Global teacher.

Department of Computer Engineering, UoP

May 2021 – present

Casual Instructor

Computing, Computer Networks, Software Construction

- Assisted lecturers to conduct labs for computer engineering courses.

Web Consultation Team, University of Peradeniya

May 2020 – Aug 2021

Member-in-Charge for Student web pages and quality content

- Collaborated on university web ranking improvement and provided SEO and web quality enhancement recommendations to Gulf University Sanad, Bahrain.

ACHIEVEMENTS/ EXTRACURRICULAR

NVIDIA Certification

2025

Fundamentals of Deep Learning

NVIDIA DLI

AWS Certification

2025

Cloud Data Pipeline Builder

AWS Academy

Coders v9.0 Inter-University Competitive Programming Contest – ACES

2022

5th place out of 100+ teams

University of Peradeniya

- Worked on algorithmic problem solving.

Hacktitude 2022 Inter-University Hackathon – 99x

2022

37th place out of 200 teams

University of Peradeniya

- Worked on a real-world project involving a web-based LMS application.
- Implemented features and fixed software bugs as a remote team collaboratively contributing to git

Sri Lanka Student Workshop on Computer Science – University of Jaffna

2023

Authored an extended research abstract

SLSWCS'23

Coders v10.0 Inter-University Competitive Programming Contest – ACES

2023

Organizing Committee Member

University of Peradeniya

- Took part in problem creation and moderation for competitive programming contest.

Hackadev - National Youth Social Innovation Challenge

2020/21

Participated and completed 6 week social innovation bootcamp

United Nations Development Programme

Rotaract Club

2020

Member : Participated in community projects to support underprivileged students in Kandy

University of Peradeniya

G.C.E Advanced Level

2017

3rd in Kandy district & 55th in the country

St. Anthony's College, Kandy

Awarded as the Best Student in the School in Physical Science Stream for the year 2017

All Island Social Science Competition

2010

Ranked 3rd in national level

St. Anthony's College, Kandy

SKILLS

Programming Languages: Python, Java, C, JavaScript, SQL

Libraries: Numpy, Pandas, Pydantic, PySpark, Matplotlib, Pytest, TensorFlow, Scikit-learn

Developer Tools: VS Code, Git, IntelliJ, Eclipse, GitHub, Azure, AWS, Docker, Postman

Technologies/Frameworks: Flask, FastAPI, MySQL, MongoDB, Django, Express, Linux, CoLab, Enactor, React

Web: HTML, CSS, JavaScript, Bootstrap, REST

REFERENCES

Prof. Roshan G. Ragel

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Head of the Department – Department of Computer Engineering

Faculty of Engineering, University of Peradeniya

Dr. Damayanthi Herath

damayanthiherath@eng.pdn.ac.lk

Senior Lecturer, Department of Computer Engineering

Faculty of Engineering, University of Peradeniya