

RASHMI PUBUDITHA

Software Engineer

rashmi99gamage@gmail.com | Hiripitiya Road, Pannipitiya, Sri Lanka | +94 711515981 / +94 740077092

<https://www.linkedin.com/in/rashmi-pubuditha-956717211> | <https://github.com/rashmipubuditha>

SUMMARY

I am an experienced and skilled programmer passionate about Software Development, ML, and DevOps. I focus on continuously growing by learning new technologies and improving my skills. I am eager to find opportunities where I can contribute, learn, and grow within the industry.

SKILLS

Technical Skills: Web Development, Python, Java, React, RESTful API, Flask, MySQL, MongoDB, Docker, CI/CD, Bash Scripting, HTML, CSS, OOP, Git, Github, Gitlab, VSCode, Postman, Jupyter Notebook, Cloud, AWS, Linux, NumPy, Pandas, OpenCV, Matplotlib, Tensorflow, Pytorch, ML, YOLO, LLM, Generative AI, RAG, Image Processing, Statistics, R

Soft Skills: Fast Learning, Decision Making, Communication, Problem-Solving, Team Collaboration, Self-motivation, Self Learning, Analytical Thinking, Creativity and Innovation

EXPERIENCE

Adveccio Pvt Ltd, Software Engineer Oct 2024 – Current

- Contributed to the end-to-end development of a business management system for VK Enterprises PVT LTD, covering business analysis, development, and deployment using Flask and React, MySQL
- Contributed to the development of "CBL Connect Plus," a web-based ERP system for CBL Distributions using React, Flask, and MySQL.
- AI-powered customer support chatbot development for a Salesforce application using Python, RASA framework, React, and Flask
- Raw material consumption prediction system for a manufacturing company based on historical data. (Python, Flask, React, SARIMA, LSTM, MS SQL)

Trainee at VEGA Innovations Pvt Ltd, Battery Research and Development Section Aug 2023 – Oct 2023

- Real-time CAN Data Logger Development (Group) - STM32 MCU Programming, PCB Designing
- CAN Data Decoding Algorithm Development (Individual) - Python, DSA, NumPy, Pandas

Trainee at KBSL Information Technologies Limited, Bharti Airtel Sri Lanka Data Center - Internet Service Provider Support team June 2022 – Aug 2022

- Data Communication and Networking , Network Devices Configuration , Network Monitoring and Reporting , Cisco Networking

EDUCATION

BSc (Hons) In Electrical and Electronic Engineering, University of Peradeniya Nov 2019 – Aug 2024

- GPA: 3.3/4.0
- Technical:** Machine Learning, Image and Video Coding, Optimization, Industrial Statistics, Operations Research

Visakha Vidyalaya, Colombo 05 Jan 2010 – Aug 2018

- G.C.E. Advanced Level Examination - 2018 / 2A'S B
- G.C.E. Ordinary Level Examination - 2015 / 9AS

PROJECTS

Improving Vehicle Number Plate Visibility via Low-Resolution Video Enhancement (Group)

- Develop an automated multi-model algorithm to enhance image visibility by integrating Image Processing and Super Resolution techniques (SRCNN and ESRGAN), Image Restoration, Motion Deblurring, and Tilt Correction.
- Tools Used: Python, NumPy, OpenCv, Tensorflow, Pytorch, Jupyter

AI-Driven Defect Detection of Flawless Ceramic Products (Group)

- Develop a real-time YOLOv8-based model for detecting and classifying defects (cracks, iron spots, and pinholes) in ceramic products manufactured at Noritake Company. (Data collection, annotation, image processing, training, and testing using NVIDIA Jetson).
- Tools Used: YOLOv8, Python, NumPy, OpenCv

Image and Video Compression System (Individual)

- Develop a hybrid video codec incorporating DCT, quantization, prediction, entropy coding, and decoding featuring block-based motion prediction and optimized for both fixed and flexible bandwidth transmission
- Tools Used: Python, NumPy, OpenCv

Designing Treadmill Dashboard

- Develop a Python-based GUI application that displays real-time workout metrics, including speed, distance, calories burned, and step rate.

IoT-based Smart Medicine Pill Dispenser (Group)

- Dispensing medication according to a pre-set schedule, providing reminders and alerts, and control using wifi via a mobile app. (Arduino, ESP 32, Google Firebase)

Hospital management system for COVID-19 (individual)

- Develop a C program for patient registration, counting patients, and managing COVID-19 hospital operations.

CERTIFICATES

AWS Cloud Practitioner Essentials by Amazon web Service - Coursera 2024

AWS Educate Badges by Amazon Web Service

- Introduction to Cloud 101, Getting Started with Compute, Getting Started with Serverless

DevOps Beginners to Advanced with Projects - Udemy 2024 (Ongoing)

Generative AI with Large Language Models by DeepLearning.ai, AWS - Coursera 2025

Machine learning specialization by deeplearning.ai - Coursera 2023

- Supervised Machine Learning: Regression and Classification, Advanced Learning Algorithms, Unsupervised Learning, Recommenders, Reinforcement Learning

Neural Networks and Deep Learning by deeplearning.ai - Coursera 2024

Introduction to Cloud Computing by IBM - Coursera 2024

Java Programming and Software Engineering Fundamentals Specialization by Duke University - Coursera

- Programming Foundations with JavaScript, HTML, and CSS | Java Programming: Solving Problems with Software, Arrays, Lists, and Structured Data, Principles of Software Design, Build a Recommendation System

Programming for Everybody , Python Data Structures by University of Michigan - Coursera 2020

REFEREE

Dr. Tharindu Weerakoon, Department of Electrical and Electronic Engineering, University of Peradeniya, Sri Lanka. Mail: tharinduw@ee.pdn.ac.lk, Tel: +94 71 804 1793,

Danushka Weerasinghe, Electronic Engineer (Battery system), Vega Innovations Pvt Ltd. Mail: danushka@vega.lk. Tel: +94 712401146