

Shantosh Muraleetharan

☎ +94 70-6098646 | ✉ e19371@eng.pdn.ac.lk | **in** [linkedin.com/in/Shantosh](https://www.linkedin.com/in/Shantosh) | **github.com/Shantosh**

EDUCATION

University of Peradeniya

Undergraduate in B.Sc. Engineering(Hons.) Computer Engineering

July. 2021 – Present

GPA 3.60/4.00

ST.Michael's College

G.C.E. Advanced Level Examination

Jan. 2006 – August 2019

District Rank - 7, National Rank - 529

EXPERIENCE

Simple Pharmacy Application

Web Application Developer (PHP)

- Developed a small pharmacy management application using PHP within a tight deadline of 5 days for a job interview
- User registration and login, Prescription upload, Quotation preparation, User acceptance/rejection of quotation, Notification to pharmacy about user's decision, Email notification to user about quotation

Mona Dashboard Industrial Project

MongoDB Database Developer and Maintainer

Oct 2023 – Current

- Developed and maintained the database for the existing industry project, "Mold Protector" web application
- Integrated backend features to enable real-time communication with the database

University of Peradeniya

Volunteer Web Application Developer and Tester

Sep 2023 – Dec 2023

- Enhanced the functionality of the University of Peradeniya Action Plan Web Application for Administration
- Additional features have been identified and implemented to digitize the administration

Mold Protector Industrial Project

Documentation Specialist, Statistical Analyst

Sep 2022 – Oct 2023

- Assisted in the development of the Instruction Manual for the Mold Protector device
- Assisted in the development of Statistical Reports for installed machines

PROJECTS

Vehicle Tracking and Accident Monitoring System | *React JS, Node JS, MongoDB, AWS*

Oct 2023 – Feb 2024

- An embedded system with ESP32, ESP32 CAM, GPS, and accelerometer modules.
- Designed the ER diagram and developed/maintained the MongoDB database.
- Developed all backend functionalities, APIs, and database connections.
- Implemented functionality to store detection of accident snaps in AWS S3 and their links in MongoDB.
- Deployed the web application on AWS EC2 and implemented AWS IoT.
- Technologies: MQTT, IoT, AWS S3, Socket.io, AWS EC2
- Github : <https://cepdnaclk.github.io/e19-3yp-School-Van-Tracking-System/>

Crop Modelling Tool For SriLanka | *PHP, Java Script, Git, Boot Strap MySQL*

Sep 2023 – Oct 2023

- Developed a web application backend using JavaScript, PHP, and Chart.js.
- Implemented crop management comparison feature and designed the graph system for visual representation of potential outcomes.
- Github : <https://cepdnaclk.github.io/e19-co227-Crop-Modelling-Tool-For-SriLanka/>

Election DataBase Management System | *Java Script, Git, PHP Boot Strap, MySQL*

May 2023 – Aug 2023

- Implemented a database system based on designed ER diagrams to handle the intricacies of election data.
- Github : <https://cepdnaclk.github.io/e19-co226-Election-Data-Base-Management-System/>

Library Management System - Mobile App | *Android Studio, XML, FireBase, Java* May 2023 – Aug 2023

- Implemented functionality allowing registered members to reserve copies if available.
- Developed feature enabling registered members to request copies if not available.
- Designed and implemented a Book Catalog and Availability system, and Borrowing and Returning functionality
- Github : <https://cepdnaclk.github.io/e19-co225-Library-Management-System/>

8-bit processor | *Verilog, ARM assembly* Dec 2022 – Jan 2023

- Designed 8-bit ALU with a register file for memory using Verilog.
- Simulated processor behaviour using Icarus Verilog and input and output signals were observed using GTKWave.
- Tested behaviour using ARM assembly code.
- Github : <https://github.com/cepdnaclk/CO224-8bit-Processor>

Cross Word Puzzle Algorithm | *C, Programming Methodology* Dec 2022 – Jan 2023

- Program reads, from standard input, a puzzle grid and a set of words and print the solved puzzle to standard output
- Program finds out that filling the crossword puzzle is impossible with the given words, print IMPOSSIBLE
- Github : <https://github.com/cepdnaclk/Cross-Word-Puzzle-Algorithm>

CERTIFICATIONS

Linux Commands & Shell Scripting Basics

EDX course offered by IBM

Certificate for completion of LX0117EN

Introduction to Linux

LFS101x course offered by LinuxFoundationX

Certificate for completion of LFS101x

Programming for Everybody (Getting Started with Python)

University of Michigan - Coursera

Certificate for completion of python beginner course

EFI Project Excellence Performance in Agriculture

Organized mini project with excellence performance on Agriculture

Certificate for EFI project

IX23 Participation Certificate

Got a certificate for the involvement in exceptional XR based designathon

Certificate of participation on IX23

TECHNICAL SKILL

Languages	Java, Python, C, SQL, JavaScript, HTML/CSS, Verilog HDL
Frameworks	React, Node.js, WordPress
Developer Tools	Git, VS Code, Visual Studio, PyCharm, IntelliJ, Android Studio, AWS
Libraries	pandas, NumPy, Matplotlib, Scikit-learn

EXTRACURRICULAR

Member of the Web Consultation team of University of Peradeniya 2020 - Present

Group focused on improving university's digital presence

Standardization using Google Search Console.

REFERENCES

Prof. Roshan G. Ragel | roshanr@eng.pdn.ac.lk

Head of Department, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

Dr. Isuru Nawinne | isurunawinne@eng.pdn.ac.lk

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