# Pamodha Chathumal

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# **EDUCATION**

B.Sc. Honours in Agricultural Technology & Management - GPA: 3.03/4.0	Jan-2019 Mar-2024
University of Peradeniya	
Specialization in Agricultural & Biosystems Engineering (Second class honors division)	
G.C.E. Advanced Level (Physics, Chemistry, Biology)	2017
G.C.E. Ordinary Level (Passed with 9 'A's)	2013

## **RESEARCH EXPERIENCE**

Design and Development of a Cloud-Based Automated System with Artificial Intelligence for a Spice Dehumidifier (Duration: 1 year - Department of Agricultural Engineering, Faculty of Agriculture, University of Peradeniya)

## PUBLICATIONS

**Chathumal, K.P.** and Amaratunga, K.S.P. -Design and Development of a Cloud-Based Automated System with Artificial Intelligence for a Spice Dehumidifier. *Proceedings of the 9th Faculty of Agriculture Undergraduate Research Symposium (FAuRS 2023/24), Faculty of Agriculture, University of Peradeniya, Sri Lanka. (ISSN 2470-7683)* 

**Chathumal, K.P.** and Chandrasekara, S.S.K. -Teleconnection between Ocean-atmospheric Oscillations and Extreme Rainfall: A Case Study for Jaffna Peninsula during 2015 and 2020. *Eds. Arasakesary, S.J. and Kajeevan. K. Proceedings of the 9th International Conference on Dry Zone Agriculture (ICDA 2023), Faculty of Agriculture, University of Jaffna, Sri Lanka. (ISSN 2465-6143)* 

Attanayake, H.A.S.V., Amaratunga, K.S.P., **Chathumal, K.P.** and Wangmo, C. Development of an Artificial Intelligence (AI) based Image Processing System for Industrial Sorting of Big Onion. *Proceedings of International Agricultural Engineering Conference 2024. Asian Association of Agricultural Engineers. (2024) - Submitted* 

# **COLLEGIATE PRESENTATIONS**

Design and Development of a Cloud-Based Automated System with Artificial Intelligence fo	ra Mar-2024
Spice Dehumidifier. Faculty of Agriculture Undergraduate Research Symposium (FAuRS 2023/24)	
EMPLOYMENT	
Graduate Teaching Assistant: Department of Agricultural Engineering, UOP	Oct-2024 – Present
<ul> <li>Assisting professors in delivering lectures, grading assignments, evaluating student</li> </ul>	
performance, and conducting tutorials while providing academic support to students.	
AWARDS AND ACHIEVEMENTS	
Best Innovative Research in Undergraduate Research Symposium Faculty of Agriculture	Mar-2024
<b>2nd Runner-Up of the Merit Awards</b> for undergraduate research of the theme on Technological Interventions & Applications, Faculty of Agriculture Undergraduate Research Symposium	Mar-2024
Honoured with the Aquatic Resource Development Project Scholarship for the <b>Best</b> <b>Innovator of the Faculty of Agriculture,</b> University of Peradeniya	Apr-2024
<b>Nominated for the Best Oral Presenter Award</b> for undergraduate research at the Faculty of Agriculture Undergraduate Research Symposium	Mar-2024
<b>Winner in All-Island School Inventors' Competition</b> conducted by the Sri Lanka Association for the Advancement of Science jointly with the Ministry of Education at the Faculty of Science, University of Colombo	Dec-2012



## **TRAINING EXPERIENCES**

5-week training period, attached to Department of Agricultural Engineering, Faculty of Agriculture, University of Peradeniya, conducted at the Meewathura Farm Premises, University of Peradeniya, with respect to farm mechanization, plantation Management and, protected agriculture	2023
6-month training in Mahailluppallama Sub-campus with respect to crop production, surveying, irrigation, and other activities related to agriculture	2019

#### SKILLS

**Computer Software & Languages:** Autodesk AutoCAD, Microsoft Office Suite, OpenOffice, C++, Python, R, R studio, Adobe Illustrator, Adobe Photoshop. **Microcontrollers Programming:** PIC, Arduino, Raspberry Pi. **Applied Engineering & Data Science:** Machine learning, Process control and automation. **Languages:** Sinhala (Native) and English (Fluent).

#### **RESEARCH INTERESTS**

Deep learning systems, machine learning, process control and automation, embedded systems, autonomous navigation of agricultural vehicles, Internet of Things, sensor development.

## **EXTRACURRICULAR ACTIVITIES**

Editor: Robobots Committee, Faculty of Agriculture, University of Peradeniya	2023
Committee Member: Agricultural Engineering Students' Society, (FOA, UOP)	2023
Editor: Art Circle, (FOA, UOP)	2020-2021
Art Circle Orchestra	2019-2023

#### **VOLUNTARY SERVICES**

Event Manager, Diamond Jubilee Launching Ceremony	2023
Coordinated and developed programs, handled multimedia, and designed promotional materials for: <i>Cultural show at The South Asian Nitrogen Hub (SANH) - Annual International Conference 2023</i> and <i>FoodInnovo 23' World Food Day Celebrations</i>	Oct-2023
Fundraising and promotional material design for the Indeewari 2023 Needy Scholarship Program	2022-2023
Backdrop animation and poster design for The South Asian Nitrogen Hub (SANH) - Annual International Conference 2023	Oct-2023
Design of promotional materials, backdrops, invitations, and certificates for: 'Scientia' - All Island Inter-School Quiz Competition & iPURSE-F 2023 (Peradeniya University International Research Sessions)	Sep-2023

#### REFEREES

#### **Prof. Sanath Amaratunga**

Professor Department of Agricultural Engineering, Faculty of Agriculture, University of Peradeniya, Peradeniya, Sri Lanka.

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## Prof. Sarath S Kodituwakku

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