

**INSTITUTE OF MATHEMATICAL SCIENCES
UNIVERSITI MALAYA**

SIRI SEMINAR KUMPULAN PENYELIDIKAN

Title: Role of mathematics in prediction models using machine learning algorithm.
Speaker: Prof. Dr. P. Balasubramaniam.
(Professor, Department of Mathematics, The Gandhigram Rural Institute
(Deemed to be University))
Date: 27/05/2022 (Friday).
Time: 10.00 am – 11.00 am.
Venue: Google Meet
Google Meet joining info
Video call link: <https://meet.google.com/rrw-fppx-bmq>
Or dial: (US) +1 347-318-9384 PIN: 118 750 420#

ABSTRACT

Crop leaf diseases are one of the primary sources of obstruction in the quality and productivity of foods, leading to the shortage of food supply. Therefore, plant leaf disease classification is essential to the agriculture industry. This presentation aims to classify plant diseases by assessing the images of the leaves with the application of a Machine Learning (ML) classification algorithm with a mathematical background. This presentation proposed image features as input where the image is pre-processed via fractional TBD mask and features extraction via GLCM. The features are then fitted into the supervised learning algorithm to perform the model training and testing. The dataset used comprises plant leaves extracted from the Plant-Village dataset. Finally, the result and coding of the plant leaf disease prediction model are shown in the MATLAB platform.

All are Welcome