



INFORMATICS
INSTITUTE OF
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INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

“CropReco”

Crop Recommendation System using Machine Learning and IoT

A Final Year Project by

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ABSTRACT

In recent decades, agriculture in Sri Lanka has undergone a technological transformation, making farming more manageable, more productive, and profitable. On the other hand, farmers face several challenges and constraints, including low productivity, poor product quality, and climate change. They grow due to direct and indirect government support, such as free irrigation and extension services, massive fertilizer subsidies, support prices, and ad hoc trade protection measures. The economic consequences of these actions mirror past governments' unsustainable and foolish policies. Sri Lanka must continue developing and implementing agricultural technological innovations to become a more productive contributor to the economy.

CropReco is a crop recommendation system that uses machine learning and the IoT to propose a crop. The CropReco system can assess crops based on many aspects affecting plant development and environmental circumstances, which may be utilized to generate suggestions. The CropReco also has a hybrid model that correctly forecasts by combining numerous machine learning algorithms. CropReco's findings may be relevant and beneficial to any decision-making authority, agriculturists, and researchers. CropReco uses an evidence-based recommendation method to address declining crop yield.

Keywords: Machine Learning, Internet of Things, Agriculture, Recommendation System, Crop production

Subject Descriptors:

Computing Methodologies >> Machine Learning