



**INFORMATICS
INSTITUTE OF
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INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

“iCrops” – Intelligent Crop tracker and Recommender

Final Project Report by

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ABSTRACT

Chemical fertilizer usage is big problem in Sri Lanka. Researchers say that the chronic kidney disease is also an effect of this chemical fertilizer usage. As traditional farming country Sri Lankan farmers were using organic fertilizer in the ancient history. But because of the increased requirements and due to the need of maximum profits farmers switched to the chemical fertilizer. To solve this problem, promotion of organic produce is a necessary thing. Organic products are not very much famous in Sri Lanka because of its price, trust issues and accessibility issues.

“iCrops” application is proposed to solve this problem. This application creates a model between farmer, supermarket, and customer to promote organic product. Fresh product home delivery in Sri Lanka is still in its early stages. And the transportation cost is also quite high due to the economic situation in Sri Lanka. So this application can be used by the supermarkets to manage customer organic product orders. Thus, reducing cost and solving accessibility issues. To make this applications recommendations more trustworthy, explainable recommendations are generated. Most of the recommendation systems does not explain the generated recommendations. Explainable recommendations are a rising area of recommendation systems. Combining it with popular transformer models this application generates an explanation to win the trust of the user.