

North south University

Department of Electrical & Computer Engineering



Smart Agriculture Monitoring System

Senior Design Project Report

Course: CSE 499B

Submitted by

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Declaration

We declare that the project titled “Smart Agriculture Monitoring” is an original project report work undertaken by us for senior project design (499B) under the supervision of Dr. Atiqur Rahman, Associate Professor, ECE, NorthSouth University. We hereby confirm the originality of the work and that there is no plagiarism in any part of the report. We have mentioned references from where we took some resources.

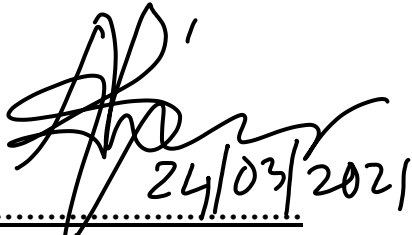
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Approval

This report has been submitted in partial requirements for completing the BS in Computer Science & Engineering (CSE) at Department of Electrical & Computer Engineering, North South University.



24/03/2021

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We students of ECE, Computer Science and Engineering, have successfully completed the project under guidance of esteemed faculties of this institute. We would like to thanks Dr. Atiqur Rahman for his valuable guidance and advice in the completion of our project. He has been extremely motivating and help us during the project. We are grateful to him for providing us all possible assistance.

Abstract

Agriculture is the root to a country's economic development. In recent times, huge scientific advancement has been implemented in various agricultural fields for the betterment of the future. Despite various researches, proper assessment and productivity couldn't be reached. We have tried to focus on different scientific applications which could be put together in the agricultural field for better accuracy with better productivity using less man-power. Moreover, we include a method for monitoring the agricultural fields from any remote location and assess the basic condition of the field. We also use solar tracking systems to generate the required renewable power supply in agriculture fields that could lead to an eco-friendly way of energy production, leading to a proper step towards the next green world.

Bangladesh economy draws its main strength from the agriculture sector. The sector contributes 19.10% to GDP (at current prices) and employs 50.28% of the labour force. However inadequate management practices are one of the driving causes for agricultural productivity to be reduce din Bangladesh. The use of fertilizers, quality seeds, and irrigation together cannot ensure sustainable production unless timely and appropriate measures for the management of other nutrients are simultaneously pursued. Therefore, this project proposes a completely innovative, user friendly technology that assists farmers in maintaining their irrigation without any effort.