Department of Electrical and Computer Engineering

North South University

Senior Design Project

A Weather Station for Collecting Local Climate and Environmental Data and Predicting Weather

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FALL, 2020

DECLARATION

This is to certify that this Project is our original work. No part of this work has been submitted elsewhere partially or fully for the award of any other degree or diploma. Any material reproduced in this project has been properly acknowledged.

Students' name & Signature

1. **Mahadiul Islam Shakib**

2. **Ishtiaq Ahmed Chowdhury**

APPROVAL

The capstone project entitled **"A Weather Station for Collecting Local Climate and Environmental Data and Predicting Weather"** by **Mahadiul Islam Shakib (ID#1511080645)** and **Ishtiaq Ahmed Chowdhury (ID #1610253642)** is approved in partial fulfillment of the requirement of the Degree of Bachelor of Science in Computer Science and Engineering on January,2021 and has been accepted as satisfactory.

Supervisor's Signature

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Department Chair's Signature

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ACKNOWLEDGMENT

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ABSTRACT

Weather is one of the most important environmental constraints in every phase of our lives on the earth. Prediction requires accurate classification of data. To predict things that are going to happen in future we need to do analysis on the factors that are related directly or indirectly. So as to make every day plans we have to rely on weather and need to know weather conditions beforehand, which could be achieved by predicting the weather condition such as humidity, rainfall, temperature, rain etc. And thus helps ourselves protect from abnormal conditions and avoids unnecessary delays. Besides, weather plays the most important role in the field of agriculture. Knowing weather conditions beforehand will help to plan harvesting to produce the maximum and avoid the loss and damages due to natural calamities. That's why we are introducing a device for collecting local weather data and predicting the weather. It will predict the temperature, humidity and precipitation of any date past, present or future. The predictions will allow the people specially farmers to take preventive measures and make better decisions for the future