**KUMARAGURU COLLEGE OF TECHNOLOGY**

**IBM – NALAYA THIRAN**

**PROJECT REPORT**

**TITLE:** SMART FARMER-IOT ENABLED SMART FARMING APPLICATION

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| Vincenza Marion A | 19BEC005 |
| Adithya S | 19BEC006 |
| Rajesh Abhishek | 19BEC022 |
| Siddharth Vinod | 19BEC024 |

**ABSTRACT**

One of the expanding needs in the agricultural sector is smart farming. Farmers will be able to simplify their tasks with the help of the Internet of Things (IOT). Important information, such temperature, wind speed, and soil moisture, will be easily accessible on the cloud. We are using the IBM cloud in this project to upload all the data. The Blynk app will be available to farmers, who may use it to obtain all the data.

**Key Words**

* Smart Farming
* IoT
* IBM cloud
* Smart Irrigation
* Web application
* Soil Monitoring
* Temperature detection

**Objective**

In order for farmers to decide whether to delay or water the field whenever and wherever by operating the motor pumps from their mobile after reviewing the sensor data, an IOT-based device that monitors the status of the soil must be created.

**Tools Required**

* Raspberry Pi
* Moisture sensor
* Temperature sensor
* Wind sensor
* IBM cloud
* IBM IOT platform
* IBM node-red
* MIT-app inventor

Mobile

Web UI

NODE-RED

IOT device

**References**

* <https://patents.google.com/patent/US20130093592A1/en?oq=us20130093592>
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