



SMART FARMING SYSTEM

Aysha Nasser Hamood Alshamsi, Marya Masoud Said Al Alawi, Shamsa Ibrahim Juma Al Balushi

University of Technology and Applied Sciences, IBRI, Oman

E-mail: 76s16356@ibrict.edu.om; 76j1634@ibrict.edu.om; 76J1623@ibrict.edu.om

Abstract:

Increasing worldwide population and abrupt weather fluctuations have put enormous pressure on food products for food quality and sustainable production. And Due to increase demand for crops and to reduce the water consumption, we aiming to develop a indoor vertical farming system based in IOT. Therefore, we have relied on the use of new technologies particular, the Internet of Things (IoT). Aim of project is to provide a indoor vertical farming monitoring system to help monitor physical conditions of crops. In the proposal, many type of sensors use to monitor productivity and quality of crops. The proposal system is to implement IoT based Smart Farming System to help farmers to monitor farm by using IOT. This design of smart farm system is important for agriculture regions to improve it. The proposed system utilizes control, which has built-in Wi-Fi connectivity, the controller reads the field soil moisture, humidity, and temperature sensors, and outputs appropriate actuation command signals to operate irrigation pumps and cooling fan, alarm and motion and fire detector.