

SmartFarmer - IoT Enabled Smart Farming Application

Problem statement

Agriculture is considered as the basis of life for the human species as it is the main source of food grains and other raw materials. Hence there is need to implement modern science and technology in the agriculture sector for increasing the yield. We get better yield if we monitor the agriculture field carefully. Also, financial risk is one of the major problem of the farmers. If their crops are damaged by severe climatic conditions i.e. if the weather is too hot on one particular day, then, farmer should ensure that plants are watered sufficiently so that plants don't die because of lack of water. In addition to that, the farmer should periodically check the soil quality of his land and add required nutrients to the farmland. Then, farmer should also ensure that all the available resources are utilized efficiently. The only solution for all these problems is smart agriculture by modernizing the current traditional methods of agriculture. Hence, the project aims at making agriculture smart using automation and IoT technologies. Controlling of some operations like humidity level, temperature level monitoring will be done through any remote smart device or computer connected to Internet and the required operations will be performed by interfacing sensors and actuators with micro-controller. Data analytics tools are used for making predictions and decisions.