Field Protection and Plant Health Monitoring System using IoT

Vamshi Krishna B¹, Jeevan Kumar K², Sowmya K³, Ruchitha P⁴, M Gangappa⁵

Students, Department of Computer Science and Engineering¹²³⁴
Associate Professor, Department of Computer Science and Engineering¹

Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology, Hyderabad, TS, India

Abstract: Agriculture is one of the most leading sectors in anyone’s life. Crop damage caused by animals and insects possess a serious threat to farmers, one of the major aspects is that it reduces crop yield. Mainly animals like buffalos, pigs, monkeys, birds are some which is the main reason for crop damage. This output leads to loss to the farmers and animals and birds puts up challenge for the farmers for crop protection. IoT based framework is one smart technology that can be used for crop protection. The process follows as when the animal enters the field it captures the movement of the animal and segregates into frames, identifies what animal it is and produces a buzzer sound of another animal that current animal is afraid off. The plant health monitoring is also done using comparison algorithm in machine learning and it sends a warning message to the farmer regarding the plant is healthy or not. This ensures that developed system will not be harmful to animals and as well as human beings and overall crop protection is being done. Various machine learning techniques are used in combination with IoT technology.

Keywords: Image processing, Machine Learning, Internet of Things (IOT)

REFERENCES