Abstract
Agriculture is one of the most important aspects of human civilization. The usages of information and communication technologies (ICT) have significantly contributed in the area in last two decades. Internet of things (IOT) is a technology, where real life physical objects (e.g. sensor nodes) can work collaboratively to create an information based and technology driven system to maximize the benefits (e.g. improved agricultural production) with minimized risks (e.g. environmental impact). Implementation of IOT based solutions, at each phase of the area, could be a game changer for whole agricultural landscape, i.e. from seeding to selling and beyond. This article presents a technical review of IOT based application scenarios for agriculture sector. The article presents a brief introduction to IOT, IOT framework for agricultural applications and discusses various agriculture specific application scenarios, e.g. farming resource optimization, decision support system, environment monitoring and control systems. The article concludes with the future research directions in this area.

References

- P. P. Jayaraman, D. Palmer, A. Zaslavsky, and D. Georgakopoulos. "Do-it-Yourself Digital Agriculture applications with semantically enhanced IoT"


Index Terms

Computer Science
Information Sciences
Keywords
IoT  ICT  WSN  Precision Agriculture  Cloud Computing