Internet of Things Applied to Agricultural Irrigation Systems in Pasture Grasses

Abstract

Irrigation in agricultural systems is responsible for most of the world's fresh water consumption. In this paper, we focus our study on applying the concepts and tools of the Internet of Things (IoT) to irrigation systems for pasture grasses. In this particular case, we study an IoT-based architecture for irrigation systems using weather forecasting, that based on its availability controls the decision of watering. The result of the proof of concept of the proposed architecture shows the potential for water savings, resource optimization, and the challenges of a real and widespread application.