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## Web-based monitoring of an automated fertigation system : An IoT application  (Conference Paper)

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### Abstract
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Internet of Things ( IoT ) is an emerging system that incorporates many technologies from different areas. In this paper, we present the implementation of IoT in an agriculture industry, particularly in monitoring an automated fertigation system . The monitoring system comprises a web-based system , an automatic fertigation system and a communication network. The main focus of this paper is on the web-based system where the data from the SQLite database is used in the web-GUI to display parameters such as the status of water level, the flow condition of valves and pipes as well as the overall operation of automated fertigation system . The paper also described on how farmers can access the website, set fertigation schedule and determine fertilizer's formulation. Different from others, this system is equipped with emergency mode to stop the fertigation system which can be controlled directly from the website. Our method uses a microprocessor to handle the databases, web-GUI and control communications between the fertigation system and the web-based system . This system will ease farmers in managing their automated fertigation system virtually using their mobile devices. © 2015 IEEE.

### SciVal Topic Prominence ⓘ

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### Author keywords

( automated fertigation system )  ( Internet of Things )  ( sensors )  ( web-GUI )

### Indexed keywords

| Engineering controlled terms: | ( Agriculture )  ( Automation )  ( Graphical user interfaces )  ( Monitoring )  ( Sensors )  ( Water levels )  ( Websites ) |
|---|---|
| Engineering uncontrolled terms | ( Agriculture industries )  ( Control communications )  ( Display parameters )  ( Fertigations )  ( Internet of Things ( IOT ) )  ( Monitoring system )  ( Web gui )  ( Web-based monitoring ) |
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