

A Review Paper on Data Security in Precision Agriculture Using Internet of Things

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Abstract : Precision agriculture uses a number of technologies, devices, protocols, and computing paradigms to optimize agricultural processes. Big data, artificial intelligence, cloud computing, and edge computing are all used to handle the huge amounts of data generated by precision agriculture. However, precision agriculture is still emerging and has a low level of security features. Furthermore, future solutions will demand data availability and accuracy as key points to help farmers, and security is important to build robust and efficient systems. Since precision agriculture comprises a wide variety and quantity of resources, security addresses issues such as compatibility, constrained resources, and massive data. Moreover, conventional protection schemes used in the traditional internet may not be useful for agricultural systems, creating extra demands and opportunities. Therefore, this paper aims at reviewing state of the art of precision agriculture security, particularly in open field agriculture, discussing its architecture, describing security issues, and presenting the major challenges and future directions.

Keywords : precision agriculture, security, IoT, EIDE

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