

## SMART FARMER- IOT ENABLED SMART FARMING APPLICATION

#	PAPER TITLE	PUBLICATION	INFERENCE	KEY CHALLENGE
1	Sensor fusion based intelligent Hydroponic farming and Nursing systems	IEEE Sensors Journal, Vol. 22, No.. 14, 15 July 2022	<ul style="list-style-type: none"> <li>• A sensor-fusion-based smart hydroponic system has been suggested.</li> <li>• The system's goal is to keep an monitor and control environmental factors so that hydroponically grown plants produce more.</li> <li>• The system uses several sensors that are coordinated to operate and communicate with one another</li> </ul>	<ul style="list-style-type: none"> <li>• Expensive to set up the design</li> <li>• Requires constant monitoring and maintenance.</li> <li>• Risks of water and electricity</li> </ul>
2	Reliability provisioning for Fog Nodes in Smart Farming IoT-Fog-Cloud continuum	Elsevier Computer and Electronics In Agriculture, July 2022	Introduces an optimization model for providing reliability and, consequently, service continuity to the IoT-Fog-Cloud continuum-based smart farms	<ul style="list-style-type: none"> <li>• Controllers and storages are distributed across various locations in the network</li> <li>• Needs more maintenance and power consumption.</li> <li>• Achieve data consistency requires more effort.</li> </ul>
3	IoT-Equipped and AI-Enabled Next generation Smart Agriculture: Current Challenges and Future Trends	Creative Commons Attributions 4.0, 2022	<ul style="list-style-type: none"> <li>• Enabling efficient management of resources</li> <li>• Minimizing water requirements for irrigation and minimizing the use of toxic pesticides.</li> </ul>	<ul style="list-style-type: none"> <li>• Requirements of high level technology is necessary</li> </ul>

4	Smart farming architectures based in IoT review: comparative study	The 2 <sup>nd</sup> International Workshop on Edge AI IoT for Smart Agriculture (SA2IOT) August 9-11, 2022	<ul style="list-style-type: none"> <li>• Comparative study of the several proposed architectures on smart farming</li> <li>• Different features, protocols, technologies, security, accessibility, interoperability, resilience etc., are analyzed</li> </ul>	<ul style="list-style-type: none"> <li>• Construction is very complex</li> <li>• Usage of many protocols makes the user discomfort with the product</li> </ul>
5	Smart Agriculture and Smart Farming using IoT Technology	IOP publishing Ltd.2021	<ul style="list-style-type: none"> <li>• IoT-based applications in agriculture</li> <li>• Identifying need for appropriate tools and explaining the functioning of the tools</li> </ul>	<ul style="list-style-type: none"> <li>• The designed product will not adopt the climate changes</li> </ul>