

Internet of Things in smart agriculture: Scopes and challenges



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The Internet of Things (IoT) is a network of physical objects that are connected to the Internet and can exchange data with other devices and systems. Smart farming, or smart agriculture, is adopting advanced technologies and data-driven farm operations to optimize and improve sustainability in agricultural production. Technologies used for smart agriculture include artificial intelligence (AI), machine learning, data analytics and the Internet of Things (IoT). Smart farming advances rapidly and uses IoT sensors, drones, and AI algorithms. These advanced technologies help farmers optimize agricultural processes, enhancing efficiency, yield, and sustainability. Real-time data processing helps precise decision-making, reducing resource wastage and environmental impact. Smart farming revolutionizes the agriculture sector and improves productivity and profitability while optimizing resource utilization by protecting the environment and natural resources.

Biography:

Dr. Sanjoy Das is currently working as Professor and Head Department of Computer Science at Indira Gandhi National Tribal University (A Central Government University), (Regional Campus Manipur)- India, since 2017. He did his B. E. and M. Tech, PhD in Computer Science. He has 18+ years of experience in Teaching and Research. He has organized many International Conferences series like ICCCA, GUCON. , ICACIT, ICEEE, ICCAIS, and attended as session chair and delivered talks in different programmes. He has published 100+ research papers in Scopus/Web of Science/SCI-indexed international journals, conference proceedings, and books. He has been the editor of eight books on various emerging areas of Computer Science published with reputed publishers like Springer, CRC, IGI Global and Apple Academic Press. He has four patents granted and four published. His current research interest includes Mobile Ad hoc Networks and Vehicular Ad hoc Networks, Distributed Systems, Data Mining and the Internet of Things, etc.