

Transforming Agriculture with Emerging Technologies for a Sustainable Future

Book Series: “**Smart Engineering Systems: Design and Applications**”

Book Series Editor: **Dr. Suman Lata Tripathi**

Editors



Dr. Shanu Sharma

ABES Engineering College,
Ghaziabad, India



Prof. (Dr.) Ayushi Prakash

Ajay Kumar Garg Engineering
College, Ghaziabad, India



Ms. Sandhya Avasthi

ABES Engineering College,
Ghaziabad, India



Prof. Vijayan Sugumaran

Oakland University, Rochester,
USA

About Book:

In the past few decades, the Smart Agriculture domain has obtained extraordinary attention from academia, government, industries, and various agricultural communities. The innovations in the field of agriculture include various domains such as precision agriculture, agricultural drones, agricultural robots, etc. intending to solve different issues such as the production of quality crops, harvesting, food security, fast-growing and meeting crop demands, complete growth tracking, drought issues, disease, or plantation issues, etc.

Recently a huge transformation has been observed with the emergence of novel technologies such as AI, IoT, Edge computing, FoG computing, Blockchain, 5G technology, etc. These emerging technologies have the capability of addressing various challenges in the agriculture industry, including lack of assured irrigation, inadequate demand, and prediction, and overuse or misuse of fertilizers and pesticides, and can create a significant global impact on agricultural productivity at all levels of the value.

Due to the remarkable power of novel technologies in changing and modernizing the agricultural value chain, this book is proposed to provide recent advancements and innovations towards novel strategies, mechanisms, and devices for future agriculture automation and transforming industrial functions to improve agricultural industrial efficiency and safety for a sustainable future.

The researchers are invited to contribute their innovative solutions and applications towards the sustainable agriculture sector.

Recommended Topics

Emerging Technologies and Sustainability in Agriculture

- Emerging Technologies and their use cases in Agriculture Sector
- Convergence of Emerging Technologies for innovative solutions
- Architecture & Frameworks for Agriculture Sector automation
- Different domains for Sustainability in Agriculture Domain

Advanced Agricultural Sensors and Intelligent Data Processing Methods

- Advanced Low-cost Sensors for Agriculture solutions
- Intelligent Methods for Sensors Data processing
- Dynamic resource provisioning for Mobile Agriculture
- Block Chain for privacy-preserving frameworks for Agriculture Sector
- Managing integrating issues during information processing

Innovations towards Smart Framing Solution

- Emerging Technologies and their use cases in Agriculture Sector
- Intelligent Methods for Crop and Livestock Monitoring
- Smart Farming using Agricultural Drones and related Applications
- Innovations towards Smart Irrigation Systems
- Smart Strategies for Agriculture Waste Management
- Block Chain enabled Food Traceability
- Crop Health Sensing Methods and Applications

Optimized Methods towards Sustainable Agriculture Sector

- Optimization of energy resources in Agriculture Sector
- Supply chain optimization during pandemic kind situations
- Directions towards Urban and Vertical Farming
- Agriculture Cybernetics
- Intelligent Environment Analysis for Optimized Vertical Farming

Important Dates

Abstract Submission:

25th April 2024

Notification on Abstract:

30th April 2024

Full Chapter Submission:

30th May 2024

Notification on Chapter:

30th June 2024

Revised Chapter Submission:

15th July 2024

Tentative Publication of Book:

Sep-Oct 2024

Kindly email the Abstract
or Full Chapter at
crcbook.sasv@gmail.com