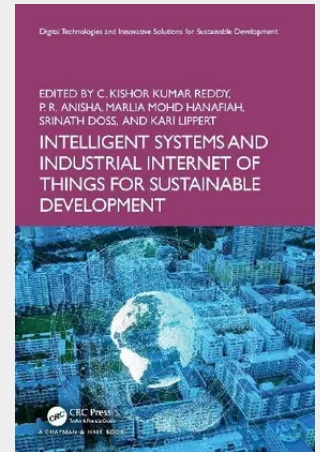


Intelligent Systems and Industrial Internet of Things for Sustainable Development

The book studies emerging and sustaining technologies for applications of Industry 5.0 to develop technological solutions to address numerous real-life challenges to solve sustainable development-related issues. It identifies limitations, pitfalls, and open research questions in industry 5.0, discusses real-time problems, and challenges with equivalent solutions with a focus on sustainable growth to develop, humanization and environmentally friendly intelligent system applications. It analyses applications enabled by Industry 5.0 such as healthcare, supply chain, smart framing, remote sensing, production in manufacturing, and cloud manufacturing. It also includes the difficulties and problems posed by the organization between robots and humans on the assembly line to maintain sustainability. - Addresses key challenges in implementing intelligent systems in IoT-based applications, including issues ranging from cost and energy efficiency to availability and quality of service - Explores the technologies to allow human-machine association and its impact on consumption and sustainability - Provides sustainable solutions to emerging industrial problems, especially in healthcare, manufacturing, remote sensing, environmental engineering - Examines need for data pre-processing, classification & prediction, Cluster Analysis, Mining Multimedia, Text, and Web Data, Advanced machine learning techniques for scientific programming in Industry - Presents success stories in the form of case studies of IIoT, IIoRT, Big Data, Intelligent Systems, Deep Learning in Industry 5.0 era The text is for postgraduate students, professionals, and academic researchers working in the fields of computer science and information technology, especially for professionals and researchers interested in the technological side of sustainable development.

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