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Autore	Lipovszky, György
Titolo	Vibration testing of machines and their maintenance / György Lipovszky , Károly Sólyomvári and Gábor Varga
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2. Record Nr.	UNINA9910915789903321
Autore	Shukla Praveen Kumar
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Altri autori (Persone)	BeraTushar Kanti
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Nota di contenuto	Intro -- Table of Content -- Title -- BENTHAM SCIENCE PUBLISHERS LTD. -- End User License Agreement (for non-institutional, personal use) -- Usage Rules: -- Disclaimer: -- Limitation of Liability: -- General: -- FOREWORD -- PREFACE -- List of Contributors -- Enhanced Machine Learning Techniques for Pest Control and Leaf Disease Identification -- Abstract -- INTRODUCTION -- RELATED WORK -- BACKGROUND STUDY -- Artificial Neural Network (ANN) -- Mayfly Optimization -- Male Mayfly's Movement -- Female Mayfly's Movement -- Mating of Mayfly -- BLACK WINDOW OPTIMIZATION -- Mathematical Evaluation -- PROPOSED METHODOLOGY -- Pre-processing -- Leaf Image from Plants - Segmentation Model Using Improved Canny Algorithm -- Steps of Improved Canny Algorithm -- Leaf Image Feature Selection Using Hybrid Black Widow Optimization Algorithm with Mayfly Optimization Algorithm (BWO-MA) -- Pseudo-Code of the Hybrid (BWO-MA) Algorithm -- Output: Objective Function's -RMSE -- Leaf Image Classification Using (BWO-MA) with ANN -- Hyper-Parameter Tuning With (BWO-MA) -- RESULT AND DISCUSSION -- Dataset Description -- Evaluation & -- Results -- CONCLUSION -- REFERENCES -- Automatic Recognition and Classification of Tomato Leaf Diseases Using Transfer Learning Model -- Abstract -- INTRODUCTION -- EXISTING WORKS -- MATERIALS AND

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 AND EXTRACTION -- CONCLUSION AND FUTURE SCOPE --
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 AND IMPLEMENTATION CONSTRAINTS -- Sensors -- Boards -- Others
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 Long short-term memory (LSTM) -- The Architecture of LSTM Network
 -- EXPERIMENTAL RESULTS -- CONCLUSION -- REFERENCES --
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 and Techniques Used for Precision Farming -- Global Positioning
 System (GPS) -- Sensor Technologies -- Geographic Information
 System (GIS) -- Grid Soil Sampling and Variable-rate Fertilizer (VRT)
 Application -- Crop Management -- Soil and Plant Sensors -- Rate
 Controllers -- Precision Irrigation in Pressurized Systems -- Software
 -- Intelligent Crop Planning -- Intelligent Crop Planning and Artificial
 Intelligence -- Climate-smart Agriculture -- Challenges that Remain --

Data -- Infrastructure -- CONCLUSION -- REFERENCES -- Artificial Intelligence and Drones in Smart Farming -- Abstract -- INTRODUCTION -- CONTRIBUTION OF THE AGRICULTURE SECTOR IN DIFFERENT TERMS -- Contribution to Employment -- Contribution to Exports -- Contribution to GDP -- METHODS TO IMPROVE FARMING PRODUCTIVITY -- Reformation of Land -- Challenges -- Inter-plantation -- Challenges -- Smart Water Management -- Challenges -- Heat Tolerant Varieties -- Challenges -- Plant Protection -- Challenges -- USE OF TECHNOLOGY IN AGRICULTURE TO OVERCOME CHALLENGES -- Improvement in Productivity Through the Mechanization of Agriculture -- Climate Forecasting Prediction Through Artificial Intelligence. Improving Farm Yields and Supply Chain Management Uses Big Data. -- Why Agricultural Drone Should be adopted? -- How can Drones Support Indian Agriculture? -- WORKING OF DRONE TECHNOLOGY -- BEST DRONE PRACTICES -- BENEFITS OF DRONE TECHNOLOGY -- DISCUSSION -- CONCLUSION -- REFERENCES.

Sommario/riassunto

Artificial Intelligence is vital to the evolution of agriculture into a smart industry. The objective of this book is to inform readers about how artificial intelligence is improving agriculture by exploring its applications. The book addresses several aspects of artificial intelligence applications in smart agriculture including, pest control, disease identification, weed detection, and security. Chapters are contributed by experts in agriculture, computer science and biotechnology. Key Themes: Advanced machine learning techniques for pest control and disease identification Automated recognition and classification of plant diseases, focusing on tomatoes and pearl millet Integration of artificial intelligence for solar-powered robots to identify weeds and damages in vegetables Development of field prevention systems to deter wild animals in farming areas Utilization of machine learning for weather forecasting to facilitate smart agriculture practices Intelligent crop planning and precision farming through AI applications Integration of artificial intelligence and drones to enhance efficiency and effectiveness in smart farming operations Other features of the book include a list of references and simple summaries in each chapter to distil the information for readers. The book is a primary reference material for courses on automation in agriculture. It can also serve as a handbook for anyone interested in advances in farming.