1. Record Nr. UNINA9910437598503321 Computer and Computing Technologies in Agriculture VI: 6th IFIP WG Titolo 5.14 International Conference, CCTA 2012, Zhangjiajie, China, October 19-21, 2012, Revised Selected Papers, Part I / / edited by Daoliang Li, Yingyi Chen Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2013 **ISBN** 3-642-36124-2 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (XVII, 455 p. 219 illus.) IFIP Advances in Information and Communication Technology, , 1868-Collana 422X;;392 Disciplina 004 Soggetti Application software Artificial intelligence Agriculture Image processing - Digital techniques Computer vision Computer networks Computer and Information Systems Applications Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics Computer Communication Networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Bibliographic Level Mode of Issuance: Monograph Note generali Research on the "Three Networks in One" Orchard Production Nota di contenuto Information Service System -- Rapid Identification of Waste Cooking Oil with Near Infrared Spectroscopy Based on Support Vector Machine -- A Decision Support System for Fish Feeding Based on Hybrid Reasoning -- Design and Implementation of Parent Fish Breeding Management System Based on RFID Technology -- Design and Development of Dissolved Oxygen Real-Time Prediction and Early Warning System for Brocaded Carp Aquaculture -- A Greenhouse Control with Sectional-Control Strategy Based on MPT Intelligent Algorithm -- Research on Digital Construction of Crop Plant Type Based on a Kind of Improved

Functional-Structural Model and Component Technology -- Edge Geometric Measurement Based Principal Component Analysis in Strawberry Leaf Images -- The Research of the Strawberry Disease Identification Based on Image Processing and Pattern Recognition --Selection of Leaf Orientation Insensitive Bands for Yellow Rust Detection -- Forecasting the Total Power of China's Agricultural Machinery Based on BP Neural Network Combined Forecast Method --Self-Organizing Map Analysis on Peanut Yield and Agronomy Characteristics -- Modeling and Simulating of Spatial Spread of Cross-Boundary Crop -- Greenhouse Wireless Monitoring System Based on the ZigBee -- Application of an Artificial Neural Network for Predicting the Texture of Whey Protein Gel Induced by High Hydrostatic Pressure -- The Classic Swine Fever Morbidity Forecasting Research Based on Combined Model -- Application and Research of Man-Machine Interface and Communication Technique of Mobile Information Acquisition Terminal in Facility Production -- CFD Modeling and Simulation of Superheated Steam Fluidized Bed Drying Process --Feasibility Study of Veterinary Drug Residues in Honey by NIR Detection -- Study on Anti-collapse Behavior of Solar Greenhouses Covering Rigid Plate under Snowstorm -- Study on Identification Method of Foreign Fibers of Seed Cotton in Hyper-spectral Images Based on Minimum Noise Fraction -- Study on Agricultural Information Push Technology Based on User Interest Model -- Research on Computer Vision-Based Object Detection and Classification -- Automatic Detection of Kiwifruit Defects Based on Near-Infrared Light Source --Cold Chain Logistics Monitoring System with Temperature Modeling --Wheat Three Dimensional Reconstruction and Visualization System --Study on Agricultural Condition Monitoring and Diagnosing of Integrated Platform Based on the Internet of Things -- The System of Anti-bud Injury in Seedcane Cutting Based on Computer Vision -- A Multi-parameter Integrated Water Quality Sensors System -- Research and Development of Decision Support System for Regional Agricultural Development Programming -- Designation of R&D on Pig Production Intelligent Monitoring and Early Warning -- Research on the Inconsistency Checking in Agricultural Knowledge Base -- Applications of Internet of Things in the Facility Agriculture -- Automatic Navigation Based on Navigation Map of Agricultural Machine -- Mathematical Study of the Effects of Temperature and Humidity on the Morphological Development of Pleurotus Eryngii Fruit Body -- Development of a Web-Based Prediction System for Wheat Stripe Rust -- Research on Semantic Text Mining Based on Domain Ontology -- The Research and Design of the Android-Based Facilities Environment Multifunction Remote Monitoring System -- The Survey of Fishery Resources and Spatial Distribution Using DIDSON Imaging Sonar Data -- Study on Cultivated Land Concentrated Areas Delineation Based on GIS and Mathematical Morphology: A Case of Miyun County and Pinggu District in Beijing --Water Temperature Forecasting in Sea Cucumber Aquaculture Ponds by RBF Neural Network Model -- Discussion on Calculation Method of Social Stability Price of Farmland Requisition Price: Taking Bazhou City as an Example -- Quantitative Analysis of and Discussion on Social Security Price of Farmland in Land Requisition Price.

Sommario/riassunto

The two-volume set IFIP AICT 392 and 393 constitutes the refereed post-conference proceedings of the 6th IFIP TC 5, SIG 5.1 International Conference on Computer and Computing Technologies in Agriculture, CCTA 2012, held in Zhangjiajie, China, in October 2012. The 108 revised papers presented were carefully selected from numerous submissions. They cover a wide range of interesting theories and applications of information technology in agriculture, including Internet

of things and cloud computing; simulation models and decision-support systems for agricultural production; smart sensor, monitoring, and control technology; traceability and e-commerce technology; computer vision, computer graphics, and virtual reality; the application of information and communication technology in agriculture; and universal information service technology and service systems development in rural areas. The 53 papers included in the first volume focus on decision support systems, intelligent systems, and artificial intelligence applications.