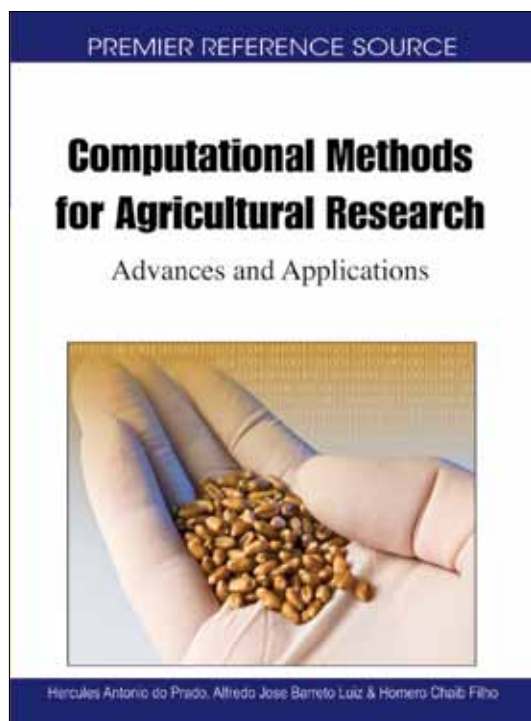


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Computational Methods for Agricultural Research: Advances and Applications



Hércules Antonio do Prado (Brazilian Enterprise for Agricultural Research and Catholic University of Brasília, Brazil), Alfredo Jose Barreto Luiz (Brazilian Enterprise for Agricultural Research, Brazil) and Homero Chaib Filho (Brazilian Enterprise for Agricultural Research, Brazil)

Despite current migration trends towards population centers, agriculture remains one of the most important staples of human culture, as these centers are dependent on a constant food supply.

Computational Methods for Agricultural Research: Advances and Applications brings computing solutions to ancient practices and modern concerns, sowing the seeds for a sustainable, constant food supply. This book treats subjects as old modeling flood patterns and predicting potential climates to distinctly 21st century topics such as pesticide leaching models and the impact of agricultural policy. All of these studies utilize cutting-edge computational techniques of interest to both academics and practitioners in agriculture but also computational modeling researchers, creating a reference practical significance.

Topics Covered:

- Neural Networks
- Computational modeling
- Flood Management Strategies
- Cultivation and harvest planning
- Impact of technology
- Impact of agriculture policy
- Agricultural Reuse of Treated Wastewater
- Seasonal precipitation forecasting
- Pesticide leaching models
- Climate and soil prediction

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Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Hércules Antonio do Prado, Ph.D. is a researcher in Computer Science, focusing his work on data/text mining, neural networks, knowledge-based systems, and knowledge management. In 1984 he joined the Brazilian Agricultural Research Corporation and, in 1992, the Catholic University of Brasília as an assistant professor. He received his D.Sc. in Computer Science at the Federal University of Rio Grande do Sul, Brazil (2001) his M.Sc. in Systems Engineering from the Federal University of Rio de Janeiro (1989). In 1999 he stayed in the Information Sciences Department of University of Pittsburgh as a Visitor Scholar, developing research for his doctoral program. He undergraduated in Computer Systems at the Federal University of São Carlos, Brazil (1976).

- Chapter 1
Scientific Computing in the Context of a Successful Agricultural Research Enterprise
Silva e Souza Geraldo da (Brazilian Agricultural Research Corporation - Secretariat for Strategic Planning, Brasília, Brazil)
Alves Eliseu Roberto de Andrade (Brazilian Agricultural Research Corporation - Secretariat for Strategic Planning, Brasília, Brazil)
- Chapter 2
Concentration and Dynamics of the Brazilian Agriculture
Garagorry Fernando Luis (Embrapa - Secretariat for Strategic Management, Brazil)
Filho Homero Chaib (Embrapa Cerrados, Brazil)
- Chapter 3
Land Cover Change:
Pérez-Hugalde Carlos (Universidad Politécnica de Madrid, Spain)
Delgado-Pérez Patricia (Universidad Politécnica de Madrid, Spain)
Romero-Calcerrada Raúl (Universidad Rey Juan Carlos, Spain)
- Chapter 4
Mining Climate and Remote Sensing Time Series to Improve Monitoring of Sugar Cane Fields
Romani Luciana A. S. (University of Sao Paulo at Sao Carlos, Brazil & Embrapa Agriculture Informatics at Campinas, Brazil)
de Sousa Elaine P. M. (University of Sao Paulo at Sao Carlos, Brazil)
Ribeiro Marcela X. (Federal University of Sao Carlos, Brazil)
de Ávila Ana M. H. (University of Campinas, Brazil)
Zullo Jurandir (University of Campinas, Brazil)
Traina Caetano (University of Sao Paulo at Sao Carlos, Brazil)
Traina Agma J. M. (University of Sao Paulo at Sao Carlos, Brazil)
- Chapter 5
Objective Sampling Estimation of Crop Area Based on Remote Sensing Images
Luiz Alfredo José Barreto (Embrapa, Brazil)
Formaggio Antonio Roberto (INPE, Brazil)
Epiphanyo José Carlos Neves (INPE, Brazil)
- Chapter 6
Study of Potential Climate for Sugarcane Production in the State of Rio Grande Do Sul, Brazil, By Means of Geoprocessing
Soares Fernando Uhlmann (Federal Institute of Education, Science and Technology of Goias, Brazil)
Alba José Maria Filippini (Embrapa Temperate Climate Research Center, Brazil)
Sebem Elódio (Federal University of Santa Maria, Brazil)
Wrege Marcos Silveira (Embrapa Forest Research Center, Brazil)
- Chapter 7
Using Self-Organizing Maps for Rural Territorial Typology
Santos da Silva Marcos Aurélio (Brazilian Agricultural Research Corporation, Embrapa Coastal Tablelands, Brazil)
Ramos de Siqueira Edmar (Brazilian Agricultural Research Corporation, Embrapa Coastal Tablelands, Brazil)
Teixeira Olívio Alberto (Federal University of Sergipe, Department of Economy, Cidade Universitária, Brazil)
Manos Maria Geovania Lima (Brazilian Agricultural Research Corporation, Embrapa Coastal Tablelands, Brazil)
Monteiro Antônio Miguel Vieira (National Institute for Space Research, Image Processing Division, Brazil)
- Chapter 8
Zoning Based on Climate and Soil for Planting Eucalyptus in Southern Region of Rio Grande do Sul State, Brazil
Alba José Maria Filippini (Embrapa Temperate Climate Research Center, Brazil)
Wrege Marcos Silveira (Embrapa Forest Research Center, Brazil)
Carlos Alberto Flores (Embrapa Temperate Climate Research Center, Brazil)
Garrastazu Marilice Cordeiro (Embrapa Forest Research Center, Brazil)
- Chapter 9
A Mixed Integer Programming Approach for Sugar Cane Cultivation and Harvest Planning
Jena Sanjay Dominik (Pontifícia Universidade Católica do Rio de Janeiro, Brazil)
Poggi de Aragão Marcus Vinicius Soledade (Pontifícia Universidade Católica do Rio de Janeiro, Brazil)
- Chapter 10
An Application of a Positive Mathematical Programming Model to Analyse the Impact of Agricultural Policy Measures in the Spanish Agricultural Sector
Asensio Lucinio Júdez (ETSIA/UPM, Spain)
Gómez de Barreda Rosario de Andrés (CSIC, Spain)
Ruiz Miguel Angel Ibáñez (ETSIA/UPM, Spain)
Miguel de Diego José-Luis (COAG, Spain)
Miqueleiz Elvira Urzainqui (CSIC, Spain)
- Chapter 11
Mathematical-Modelling Simulation Applied to Help in the Decision-Making Process on Environmental Impact Assessment of Agriculture
Pessoa Maria Conceição Peres Young (Embrapa Environment, Jaguariúna/SP, Brazil)
Fernandes Elizabeth Nogueira (Embrapa Dairy Cattle, Juiz de Fora/MG, Brazil)
Nascimento de Queiroz Sonia Cláudia do (Embrapa Environment, Jaguariúna/SP, Brazil)
Ferracini Vera Lúcia (Embrapa Environment, Jaguariúna/SP, Brazil)
Gomes Marco Antonio Ferreira (Embrapa Environment, Jaguariúna/SP, Brazil)
Dornelas de Souza Manoel (Embrapa Environment, Jaguariúna/SP, Brazil)
- Chapter 12
A Linear Optimization Approach for Increasing Sustainability in Vegetable Crop Production
dos Santos Lana Mara R. (Universidade Federal de Viçosa, Brazil)
Arenales Marcos N. (Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo, Brazil)
Costa Alysson M. (Instituto de Ciências Matemáticas e de Computação, Universidade de São Paulo, Brazil)
Santos Ricardo H. S. (Universidade Federal de Viçosa, Brazil)
- Chapter 13
Pesticide Leaching Models in a Brazilian Agricultural Field Scenario
Júnior Rômulo Penna Scorza (Embrapa Western Region Agriculture, Brazil)
Rigitano Renê Luis de Oliveira (Federal University of Lavras (UFLA), Brazil)
Boesten Jos J. T. I. (Wageningen University and Research Centre (WUR), The Netherlands)
- Chapter 14
A Computational Agent Model of Flood Management Strategies
Brouwers Lisa (The Royal Institute of Technology, School of ICT, Sweden)
Boman Magnus (The Royal Institute of Technology, School of ICT, Sweden & The Swedish Institute of Computer Science (SICS), Sweden)
- Chapter 15
Computational Techniques for Biologic Species Distribution Modeling
Corrêa Pedro Luiz Pizzigatti (Agricultural Automation Laboratory, Polytechnic School of the University of Sao Paulo, EPUSP, Brazil)
Carvalhoes Mariana Aparecida (Brazilian Agricultural Research Corporation, EMBRAPA Middle-North, Brazil)
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Rodrigues Elisângela Silva da Cunha (Agricultural Automation Laboratory, Polytechnic School of the University of Sao Paulo, EPUSP, Brazil)
Luis de Azevedo da Rocha Ricardo (Laboratory of Languages and Adaptive Techniques, Polytechnic School of the University of Sao Paulo, EPUSP, Brazil)
- Chapter 16
Seasonal Precipitation Forecast Based on Artificial Neural Networks
Rolim da Paz Adriano (Federal University of Paraíba, Brazil)
Uvo Cintia Bertacchi (Lund University, Sweden)
Bravo Juan Martín (Federal University of Rio Grande do Sul, Brazil)
Collischonn Walter (Federal University of Rio Grande do Sul, Brazil)
Ribeiro da Rocha Humberto (University of São Paulo, Brazil)
- Chapter 17
Descriptive Methods and Compromise Programming for Promoting Agricultural Reuse of Treated Wastewater
Ben Brahim Hella (University of Tunis - El Manar, Tunisia)
Duckstein Lucien (University of Arizona, USA)
- Chapter 18
Towards Spatial Decision Support System for Animals Traceability
Visoli Marcos (Embrapa Agriculture Informatics, Campinas, Brazil)
Bimonte Sandro (Cemagref, TSCF, Clermont Ferrand, France)
Ternes Sônia (Embrapa Agriculture Informatics, Campinas, Brazil)
Pinet François (Cemagref, TSCF, Clermont Ferrand, France)
Chanel Jean-Pierre (Cemagref, TSCF, Clermont Ferrand, France)
- Chapter 19
Construction of Agri-Environmental Data Using Computational Methods:
Uchida Susumu (National Agriculture and Food Research Organization, JAPAN)
Hayashi Kiyotada (National Agriculture and Food Research Organization, JAPAN)
Sato Masaei (National Agriculture and Food Research Organization, JAPAN)
Hokazono Shingo (National Agriculture and Food Research Organization, JAPAN)