

Book Reviews | Reseñas

HANDBOOK OF THE ECONOMICS OF EDUCATION

Stephen Machin, Ludger Woessmann, Eric Hanushek, Editors, (2023)

Elsevier
9780443132766

Hardback ISBN:

This book is an addition to a series covering the problematics of economical aspects of education in USA, It is the seventh one in it and is developed to describing actual aspects needing of some methodical review. Readers will obtain a good starting point for working in research related with the effectiveness of measuring and developing methods for evaluations of the effectivity the training of teachers and involved firms, . Through its pages the lector will obtain, in the different sections, firsthand information on the financial situation of schooling in United States such as costs, resources management and the outcomes, the policies for providing aid to students.

By bringing together some of the world's leading scholars, this volume provides a unique view of scholarship in the area.

G. S. Pessoiish
Pessoiish & Gupta Associated

PROBABILITY AND STATISTICS FOR PHYSICAL SCIENCES (2ND. EDITION)

Brian Martin, Mark Hurwitz (2023)

Academic Press

ISBN: 9780443189692

This new edition, again presents a good guide to using theoretical conceptualizations and methods for solving statistical problems present in the physical sciences. The book provides a compact and friendly systematic introduction of the usual techniques, giving the needed mathematics. It does not need having a solid knowledge of mathematical statistics, though it will good having it. I recommend it as a text for undergraduate courses.

M. H. Still
M. B. P. School of Engineering

ARTIFICIAL INTELLIGENCE

Arni Srinivasa Rao, C.R. Rao, Steven Krantz (2023)

Elsevier

ISBN: 9780443137631

Artificial Intelligence presents a set of new theoretical models in the theme, for all researchers in the theme it provides highlights on the new advances in Artificial Intelligence (AI). The chapters cover issues in the relations of AI Teacher-Student (using particular tools of Deep Learning Modelung), Estimating the Uncertainty of Image Data, Machine-derived Intelligence, the computations beyond the

Null Hypothesis testing problems, Object oriented basis of AI methodologies in Judicial Systems in India, Biological Systems, Machine-Learning in Geometry and Physics, Innovations and Machine Learning, Crowd-sourcing Open-Source Natural Language Processing (NLP) Algorithms to Advance Public Health Surveillance, Learning and identity testing of Markov chains, Data privacy for machine learning and statistics-

It is remarkable the discussions of the interface between AI and Mathematic models.

M. J. Arellano
Advance Computation School

MATHEMATICAL MODELING, SIMULATIONS, AND AI FOR EMERGENT PANDEMIC DISEASES. LESSONS LEARNED FROM COVID-19

Editors: Edgar Sanchez, Esteban Hernandez-Vargas, Jorge Velasco-Hernandez (2023)

Academic Press

ISBN: 9780323950640 eBook ISBN: 9780323950657

This book presents a set of new theoretical models and simulation supports that have been developed for responding the challenges posed by COVID-19 pandemic. Theoretical problems for implementing Mathematical methods have been thoroughly used for strategic decision making for dealing with the impacts of pandemic development. It provides models for forecasting the behavior of various elements of COVID-19, such as the evolution of viral variants, optimal allocations of masks, antibiotics etc., and vaccination schemes.

The mathematical techniques that are presented worked well in the managing the impact of the pandemic in public health, Among them we have: ordinary differential equations, difference equations, agent-based models, methodologies using artificial intelligence and networking. The papers presents experiences that may be of use for modeling other emergent pandemic diseases.

The book is a good source for the strategic preparation of the scientific community for using in practice with quantitative methods implemented in computers. Note that the nature of the mathematical models for pandemics allow to be better prepared for the next pandemic, as well as for modeling in ecology, economics and epidemiology.

C. I. Patrick
Medical Research Institute

ADVANCEMENTS IN BAYESIAN METHODS AND IMPLEMENTATIONS

Editors: Alastair Young, Arni Srinivasa Rao, C.R. Rao (2022)

North Holland

ISBN: 97803239526 eBook ISBN: 9780323952699

Advancements in Bayesian Methods and Implementation is the Volume 47th of the series Handbook of Statistics. It is concerned with issues of nowadays theoretical and practical importance, You will obtain in it firsthand results on Fisher Information, Cramer-Rao and the Bayesian Paradigm, Compound Beta Binomial distribution functions, MCMC for GLMMS, Signal Processing and Bayesian, Mathematical theory of Bayesian statistics where all models are wrong, Machine Learning and Bayesian, Non-parametric Bayes, Bayesian testing, and Data Analysis with humans, Variational inference or Functional horseshoe, Generalized Bayes.

Bayesian will be delighted with this book as some new research areas may stimulated to be developed and the applications encouraged.

I recommend it specially for statisticians working in medical research.

P. Gupta
Advanced Computation School