Stochastic Programming Optimization When Uncertainty Matters

Stochastic Programming Optimization When Uncertainty
Høeg 15. Melt control: charge optimization via stochastic programming Jitka Dupacová and Pavel Popela 16. A stochastic programming model for network resource utilization in the presence of multiclass ...

Applications of Stochastic Programming
mixed-integer and generalized disjunctive programming), optimization under uncertainty (stochastic programming and flexibility analysis), and decomposition techniques (Lagrangean and Benders ...

Advanced Optimization for Process Systems Engineering
Course in stochastic optimization with an emphasis on formulating, solving, and approximating optimization models under uncertainty. Topics include: Models and applications: extensions of the linear ...

IEMS 451: Stochastic Optimization
The interplay between optimization and machine learning is one of the most important developments in modern computational science. Optimization formulations ...

Optimization for Machine Learning
This paper applies double-uncertainty optimization theory to the operation of AC/DC hybrid microgrids to deal with uncertainties caused by a high proportion of intermittent energy sources. A fuzzy ...

Double-uncertainty optimal operation of hybrid AC/DC microgrids with high proportion of intermittent energy sources
Simulation research derives new methods for the design, analysis, and optimization of simulation experiments. Research on stochastic models develops and analyzes models of systems with random behavior ...

Stochastic Analysis & Simulation
The increased deployment of distributed generation calls for the coordination and interaction between the transmission and distribution levels. This requirement is particularly relevant for planning ...

Integrated Transmission and Distribution System Expansion Planning under Uncertainty
The last years have seen an extraordinary acceleration of interest in the analysis and control of systems with a particular focussing of attention upon self-regulating systems. We must face the fact ...

Adaptive Control Processes: A Guided Tour
Rapid-response vaccine production platform technologies, including RNA vaccines, are being developed to combat viral epidemics and pandemics. A key enabler of rapid response is having quality-oriented ...

Quality by design modelling to support rapid RNA vaccine production against emerging infectious diseases
These results reveal a fruitful interplay between algorithm design and active matter robophysics that can result in principles for programming collectives without the need for complex algorithms or ...

Programming active cohesive granular matter with mechanically induced phase changes
Primary areas of interest are applied statistics, optimization, business analytics, operations management, inventory theory, scheduling, manufacturing under uncertainty ... and good programming skills ...

Operations Research Concentration
Major upgrade to the ever-evolving Oracle Database brings JavaScript support, graph optimizations, in-memory enhancements, and dramatic improvements to JSON operations and in-database machine learning ...

Oracle Database 21c review: The old RDBMS is new again
A survey of quantitative approaches for making optimal decisions under uncertainty, including decision trees ... Machine learning methods are linked to the stochastic optimization models..

Operations Research and Financial Engineering
Statistical Inference via Convex Optimization ... programming for the last two decades. Two contrasting approaches in the analysis and implementation of IPMs are the so-called small-update and...

Princeton Series in Applied Mathematics
As the world navigates a global pandemic, 2020 has conditioned us all to live with uncertainty in new and ... Probabilistic, or stochastic, models using Monte Carlo simulations are one such ...

Expect the unexpected – Black swans can open doors to opportunity
Xiaojun Chen, Hong Kong Polytechnic University, is being recognized for contributions to optimization, stochastic variational ... pioneering contributions to uncertainty quantification and the ...

SIAM Announces Class of 2021 Fellows
Thereafter, he joined the COSMO Stochastic Mine Planning Laboratory at McGill University, Canada, where he focused on mine planning optimization and ore-body modeling under uncertainty. He completed ...

Snehamoy Chatterjee
A Robust Optimization Model for Tactical Capacity ... N. Brown. Solving a Stochastic Queueing Design and Control Problem with Constraint Programming. In Proceedings of the Twenty-Second AAAI ...

Daria Terekhov, Ph.D.
Website: https://hcho.isnew.info/ Areas of Expertise: Application of GIS to Hydrology, Open Source GIS, Watershed Modeling, Water Resources Engineering, Heuristic Optimization Huidae Cho, Jeongha Park ...

Huidae Cho
Topics include regression analysis, decision analysis, stochastic environments, data sources and errors, utility theory risk preference, linear programming ... solution under conditions of ambiguity ...