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| Autore                  | Royset Johannes O.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Titolo                  | An optimization primer / / Johannes O. Royset and Roger J.-B. Wets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| Soggetti                | Optimització matemàtica<br>Mathematical optimization<br>Llibres electrònics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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4.G Tangent and Normal Cones I -- 4.H Tangent and Normal Cones II -- 4.I Subdifferentiability -- 4.J Optimality Conditions -- 4.K SQP and Interior-Point Methods -- 5 PERTURBATION AND DUALITY -- 5.A Rockafellians -- 5.B Quantitative Stability -- 5.C Lagrangians and Dual Problems -- 5.D Lagrangian Relaxation -- 5.E Saddle Points -- 5.F Strong Duality -- 5.G Reformulations -- 5.H L-Shaped Method -- 5.I Monitoring Functions -- 5.J Lagrangian Finite-Generation Method -- 6 WITHOUT CONVEXITY OR SMOOTHNESS. 6.A Second-Order Analysis -- 6.B Augmented Lagrangians -- 6.C Epigraphical Nesting -- 6.D Optimality Conditions -- 6.E Sup-Projections -- 6.F Proximal Composite Method -- 6.G Design of Multi-Component Systems -- 6.H Difference-of-Convex Functions -- 6.I DC in Regression and Classification -- 6.J Approximation Errors -- 7 GENERALIZED EQUATIONS -- 7.A Formulations -- 7.B Equilibrium in Energy Markets -- 7.C Traffic Equilibrium -- 7.D Reformulation as Minimization Problems -- 7.E Projection Methods -- 7.F Nonsmooth Newton-Raphson Algorithm -- 7.G Continuity of Set-Valued Mappings -- 7.H Graphical Approximation Algorithm -- 7.I Consistent Approximations -- 7.J Approximation Errors -- 8 RISK MODELING AND SAMPLE AVERAGES -- 8.A Estimation of Optimality Gaps -- 8.B Risk and Regret -- 8.C Risk-Adaptive Data Analytics -- 8.D Duality -- 8.E Subgradients of Functionals -- 8.F Residual Risk and Surrogates -- 8.G Sample Average Approximations -- 8.H Concentration Inequalities -- 8.I Diametrical Stochastic Optimization -- 9 GAMES AND MINSUP PROBLEMS -- 9.A Nash Games -- 9.B Formulation as Minsup Problems -- 9.C Bifunctions and Solutions -- 9.D Lopsided Approximation Algorithm -- 9.E Lop-Convergence I -- 9.F Lop-Convergence II -- 9.G Approximation of Games -- 9.H Walras Barter Model -- 10 DECOMPOSITION -- 10.A Proximal Alternating Gradient Method -- 10.B Linkage Constraints -- 10.C Progressive Decoupling Algorithm -- 10.D Local Elicitation -- 10.E Decoupling in Stochastic Optimization -- 10.F Strong Monotonicity -- 10.G Variational Convexity and Elicitation -- 10.H Nonlinear Linkage -- References -- Index.

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