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Nota di contenuto	On some piecewise linear classifiers based on non-smooth optimization (A.M. BAGIROV) -- Local-optimal solutions and their applications (H.D. CHIANG) -- Cyber security investments with nonlinear budget constraints (P. DANIELE) -- Systemic theory and deterministic prediction (N.J. DARAS) -- Poincaré type inequalities for Green's operator on harmonic forms (S. DING) -- Inequalities for relative operator entropy (S. DRAGOMIR) -- Complementarity and variational inequalities with applications in electronics (D.GOELEVEN) -- Strong and weak convexity of closed sets in a Hilbert space (V.V. GONCHAROV) -- Counterfactual reasoning with Bayesian networks as a healthcare governance tool to enhance defence medical services (E. KYRIMI, S. MOSSADEGH, N. TAI and W. MARSH) -- An optimization methodology for operational environmental forecasting systems (G. KOUMPAROULIS and G. GALANIS) -- When Data reveals ransomware activity (J.L. LANET) -- On non-smooth multiobjective optimality conditions (M.M. MAKELA) -- Small array systems with massive performance capabilities: Beamforming, localization and tracking (A. MANIKAS and V. SRIDHAR) -- Bottom-up hierarchical ramp secret sharing scheme (G. MELETIOU, S.A.N. ALEXANDROPOULOS, D. S. TRIANTAFYLLOU and M.N. VRAHATIS) -- Separation of finitely many

convex sets (D. PALLASCHKE) -- Optimization Theory (P. PARDALOS) -- Blind transfer of personal data insuring privacy (R. ROLLAND and A. BONNECAZE) -- Optimization problems with hidden nonconvex structures (A.S. STREKALOVSKY) -- On the congruence subgroups of braid groups (C.STYLIANAKIS) -- Military info-support operations in modern conflicts: evolution of MISO's methodology during the modern conflicts in XXI century (T. SCZUREK and M. GORNIKIEWICZ) -- Safety and Security for the system-of-systems in the military from a cyber-physical perspective in the new era of Internet-of-Things (W.R. TSAGALIDIS) -- Formal modeling and verification of an autonomous swarm of UAVs for monitoring applications (A. TSOURDOS and V. LAPPAS) -- Metrical Pareto efficiency and monotonicity (M. TURINICI).

Sommario/riassunto

This volume presents a broad discussion of computational methods and theories on various classical and modern research problems from pure and applied mathematics. Readers conducting research in mathematics, engineering, physics, and economics will benefit from the diversity of topics covered. Contributions from an international community treat the following subjects: calculus of variations, optimization theory, operations research, game theory, differential equations, functional analysis, operator theory, approximation theory, numerical analysis, asymptotic analysis, and engineering. Specific topics include algorithms for difference of monotone operators, variational inequalities in semi-inner product spaces, function variation principles and normed minimizers, equilibria of parametrized N-player nonlinear games, multi-symplectic numerical schemes for differential equations, time-delay multi-agent systems, computational methods in non-linear design of experiments, unsupervised stochastic learning, asymptotic statistical results, global-local transformation, scattering relations of elastic waves, generalized Ostrowski and trapezoid type rules, numerical approximation, Szász Durrmeyer operators and approximation, integral inequalities, behaviour of the solutions of functional equations, functional inequalities in complex Banach spaces, functional contractions in metric spaces.
