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Autore	Cursi Eduardo Souza de
Titolo	Modeling and convexity // Eduardo Souza de Cursi, Rubens Sampaio
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Descrizione fisica	1 online resource (517 p.)
Collana	ISTE
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Soggetti	Engineering mathematics Machinery - Mathematical models Convex sets
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title Page; Copyright Page; Table of Contents; Introduction; PART 1. MOTIVATION: EXAMPLES AND APPLICATIONS; Chapter 1. Curvilinear Continuous Media; 1.1. One-dimensional curvilinear media; 1.1.1. Ideally flexible string; 1.1.1.1. The essential difficulty; 1.1.1.2. Unilateral contact; 1.1.2. The ""elastica"" problem: buckling of an inextensible beam; 1.2. Supple membranes; 1.2.1. Curvilinear coordinates and charts; 1.2.2. Metric tensor; 1.2.3. Internal efforts and constitutive law; 1.2.4. Exterior efforts; 1.2.5. Infinitesimal deformations; 1.2.6. Principle of minimum energy Chapter 2. Unilateral System Dynamics2.1. Dynamics of ideally flexible strings; 2.1.1. Propagation of discontinuities; 2.1.2. Evolution; 2.1.3. Vibrations; 2.1.3.1. Harmonic response; 2.1.3.2. Small oscillations; 2.2. Contact dynamics; 2.2.1. Evolution of a material point; 2.2.2. Evolution of deformable and non-deformable solids; 2.2.3. Granular modeling of the movement of a crowd; Chapter 3. A Simplified Model of Fusion/Solidification; 3.1. A simplified model of phase transition; Chapter 4. Minimization of a Non-Convex Function; 4.1. Probabilities,

convexity and global optimization

Chapter 5. Simple Models of Plasticity 5.1. Ideal elastoplasticity; PART 2. THEORETICAL ELEMENTS; Chapter 6. Elements of Set Theory; 6.1. Elementary notions and operations on sets; 6.2. The axiom of choice; 6.3. Zorn's lemma; Chapter 7. Real Hilbert Spaces; 7.1. Scalar product and norm; 7.2. Bases and dimensions; 7.3. Open sets and closed sets; 7.4. Sequences; 7.4.1. Dense sequences and dense sets; 7.5. Linear functionals; 7.5.1. Sequences and continuity; 7.6. Complete space; 7.6.1. The Cauchy sequence; 7.6.2. Completion of a space; 7.6.3. Baire's theorem: a property of complete spaces 7.7. Orthogonal projection onto a vector subspace 7.8. Riesz's representation theory; 7.9. Weak topology; 7.10. Separable spaces: Hilbert bases and series; Chapter 8. Convex Sets; 8.1. Hyperplanes; 8.2. Convex sets; 8.3. Convex hulls; 8.4. Orthogonal projection on a convex set; 8.5. Separation theorems; 8.6. Convex cone; Chapter 9. Functionals on a Hilbert Space; 9.1. Basic notions; 9.2. Convex functionals; 9.3. Semi-continuous functionals; 9.4. Affine functionals; 9.5. Convexification and LSC regularization; 9.6. Conjugate functionals; 9.7. Subdifferentiability; Chapter 10. Optimization 10.1. The optimization problem 10.2. Basic notions; 10.2.1. Minimizing sequences; 10.2.2. Indicator function; 10.2.3. Coerciveness; 10.3. Fundamental results; 10.3.1. Approximation; 10.3.1.1. Exterior penalty approximation; 10.3.1.2. Interior penalty approximation; 10.3.1.3. Approximation by regularization; 10.3.1.4. Duality approximation; Chapter 11. Variational Problems; 11.1. Fundamental notions; 11.1.1. Proximal elements; 11.1.2. Operators and monotony; 11.1.2.1. Monotony; 11.1.2.2. Semi-continuous operators and hemi-continuous operators; 11.1.2.3. Maximal monotone operators 11.1.2.4. Brouwer's fixed point theorem

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## Sommario/riassunto

This reference book gives the reader a complete but comprehensive presentation of the foundations of convex analysis and presents applications to significant situations in engineering. The presentation of the theory is self-contained and the proof of all the essential results is given. The examples consider meaningful situations such as the modeling of curvilinear structures, the motion of a mass of people or the solidification of a material. Non convex situations are considered by means of relaxation methods and the connections between probability and convexity are explored and exploited in o

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2. Record Nr.	UNINA9910964227803321
Autore	Samson Jane <1962->
Titolo	Race and empire // Jane Samson
Pubbl/distr/stampa	London ; ; New York : , : Routledge, , 2013
ISBN	1-317-87604-0 1-315-83816-8 1-317-87605-9
Descrizione fisica	1 online resource (186 pages)
Collana	Seminar Studies
Disciplina	305.8/009 305.8009
Soggetti	Race relations - History Imperialism - History Racism - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	First published 2005 by Pearson Education Limited.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1. The background -- Part 2. Analysis -- Part 3. Assessment -- Part 4. Documents.
Sommario/riassunto	Readers at the beginning of the twenty-first century are probably more racially self-aware than any other generation has been. Like the relationship between gender and history, that between race and history is perceived to be of the utmost importance by young people and the older generation because it has left such a controversial legacy in the shape of hopes for multiculturalism, diversity, and tolerance. This new Seminar Study provides an introduction to the intricate and far-reaching relationship between attitudes toward racial difference and imperial expansion. Imperialism is a topic that can be approached from many different angles. By concentrating on the topical issue of race, this book takes a very different approach from the more familiar political or economic studies of imperial expansion.