1.	Record Nr.	UNINA9910780893703321
	Autore	Cushman Richard H. <1942->
	Titolo	Geometry of nonholonomically constrained systems [[electronic resource] /] / Richard Cushman, Hans Duistermaat, Jedrzej Sniatycki
	Pubbl/distr/stampa	Singapore ; ; Hackensack, NJ, : World Scientific, c2010
	ISBN	1-282-76167-6
		9786612761676
		981-4289-49-3
	Descrizione fisica	1 online resource (421 p.)
	Collana	Advanced series in nonlinear dynamics ; ; v. 26
	Altri autori (Persone)	DuistermaatJ. J <1942-2010.> (Johannes Jisse)
		SniatyckiJedrzej
	Disciplina	516.3/6
	Soggetti	Nonholonomic dynamical systems
		Geometry, Differential
		Rigidity (Geometry)
		Caratheodory measure
	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 (p. 387-393) and index.
	Nota di contenuto	Contents; Acknowledgments; Foreword; 1. Nonholonomically constrained motions; 1.1 Newton's equations; 1.2 Constraints; 1.3 Lagrange-d'Alembert equations; 1.4 Lagrange derivative in a trivialization; 1.5 Hamilton-d'Alembert equations; 1.6 Distributional Hamiltonian formulation; 1.6.1 The symplectic distribution (H,); 1.6.2 H and in a trivialization; 1.6.3 Distributional Hamiltonian vector field; 1.7 Almost Poisson brackets; 1.7.1 Hamilton's equations; 1.7.2 Nonholonomic Dirac brackets; 1.8 Momenta and momentum equation; 1.8.1 Momentum functions; 1.8.2 Momentum equations
		1.8.3 Homogeneous functions1.8.4 Momenta as coordinates; 1.9 Projection principle; 1.10 Accessible sets; 1.11 Constants of motion; 1.12 Notes; 2. Group actions and orbit spaces; 2.1 Group actions; 2.2 Orbit spaces; 2.3 Isotropy and orbit types; 2.3.1 Isotropy types; 2.3.2 Orbit types; 2.3.3 When the action is proper; 2.3.4 Stratification on by orbit types; 2.4 Smooth structure on an orbit space; 2.4.1 Differential structure; 2.4.2 The orbit space as a differential space; 2.5 Subcartesian spaces; 2.6 Stratification of the orbit space by orbit types;

| Sommario/riassunto | This book gives a modern differential geometric treatment of linearly nonholonomically constrained systems. It discusses in detail what is meant by symmetry of such a system and gives a general theory of how to reduce such a symmetry using the concept of a differential space and the almost Poisson bracket structure of its algebra of smooth functions. The above theory is applied to the concrete example of Caratheodory's sleigh and the convex rolling rigid body. The qualitative behavior of the motion of the rolling disk is treated exhaustively and in detail. In particular, it classifies all mot |

2.	Record Nr.	UNINA9910767507003321
	Titolo	Internet of Things and Big Data Technologies for Next Generation Healthcare / / edited by Chintan Bhatt, Nilanjan Dey, Amira S. Ashour
	Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
	ISBN	3-319-49736-7
	Edizione	[1st ed. 2017.]
	Descrizione fisica	1 online resource (X, 388 p. 159 illus.)
	Collana	Studies in Big Data, , 2197-6503 ; ; 23
	Disciplina	004.6780151932
	Soggetti	Computational intelligence Artificial intelligence Medical informatics Biomedical engineering Medicine - Practice Computational Intelligence Artificial Intelligence Health Informatics Biomedical Engineering and Bioengineering Practice and Hospital Management
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references at the end of each chapters.
	Sommario/riassunto	This comprehensive book focuses on better big-data security for healthcare organizations. Following an extensive introduction to the Internet of Things (IoT) in healthcare including challenging topics and scenarios, it offers an in-depth analysis of medical body area networks with the 5th generation of IoT communication technology along with its nanotechnology. It also describes a novel strategic framework and computationally intelligent model to measure possible security vulnerabilities in the context of e-health. Moreover, the book addresses healthcare systems that handle large volumes of data driven by patients' records and health/personal information, including big-data-based knowledge management systems to support clinical decisions.

Several of the issues faced in storing/processing big data are presented along with the available tools, technologies and algorithms to deal with those problems as well as a case study in healthcare analytics. Addressing trust, privacy, and security issues as well as the IoT and big-data challenges, the book highlights the advances in the field to guide engineers developing different IoT devices and evaluating the performance of different IoT techniques. Additionally, it explores the impact of such technologies on public, private, community, and hybrid scenarios in healthcare. This book offers professionals, scientists and engineers the latest technologies, techniques, and strategies for IoT and big data.