Record Nr. UNINA9910299902103321 Co-utility [[electronic resource]]: Theory and Applications // edited by **Titolo** Josep Domingo-Ferrer, David Sánchez Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-60234-9 Edizione [1st ed. 2018.] 1 online resource (216 pages) : illustrations Descrizione fisica Collana Studies in Systems, Decision and Control, , 2198-4182; ; 110 Disciplina 153.90151 Soggetti Computational intelligence Game theory Computational Intelligence Game Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Co-Utility: Designing Self-Enforcing and Mutually Benecial Protocols -- On the Different Forms of Individual and Group Strategic Behavior, and Their Impact on Efciency -- Co-Utile P2P Anonymous Keyword Search -- Co-Utile Enforcement of Digital Oblivion -- Self-Enforcing Collaborative Anonymization Via Co-Utility -- Aspects of Coalitions for Environmental Protection under Co-utility. This book explores the theoretical foundations of co-utility as well as Sommario/riassunto its application to a number of areas, including distributed reputation management, anonymous keyword search, collaborative data anonymization, digital oblivion, peer-to-peer (P2P) content distribution, ridesharing for sustainable mobility, environmental economy, business model design and the collaborative economy. It evolved from presentations at the 1st Co-Utility Workshop, "held in Tarragona, Spain, on March 10–11, 2016." How can we guarantee that a global society without a common legal framework operates smoothly? If generosity, honesty and helpfulness do not arise spontaneously, one approach would be to design transactions so that helping others remains the best rational option. This is precisely the goal of co-utility,

> which can be defined in game-theoretic terms as any interaction between peers in which the best option for a player to maximize her or

his utility is to make sure the other players also enjoy a fair share of utility (for example, functionality, security or privacy). Therefore, a protocol or mechanism designed using the co-utility principle ensures that helping others is the best rational option, even if players are selfish.