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Soggetti	Telecommunication Game theory Application software Electric power production Signal processing Communications Engineering, Networks Game Theory Computer and Information Systems Applications Electrical Power Engineering Signal, Speech and Image Processing
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Nota di contenuto	Chapter 1. Game Theory and Networking -- Chapter 2. Using Game Theory to address new security risks in the IoT -- Chapter 3. Using Game Theory to address mobile data offloading in 5G -- Chapter 4. Using Game Theory to motivate trust in ad-hoc vehicular networks -- Chapter 5. Using Game Theory to characterise tradeoffs between cloud providers and service providers for health monitoring services.
Sommario/riassunto	This book shows how to model selected communication scenarios using game theory. The book helps researchers specifically dealing with scenarios motivated by the increasing use of the Internet of Things (IoT) and 5G Communications by using game theory to approach the

study of such challenging scenarios. The author explains how game theory acts as a mathematical tool that models decision making in terms of strategies and mechanisms that can result in optimal payoffs for a number of interacting entities, offering often antagonistic behaviors. The book explores new technologies in terms of design, development and management from a theoretical perspective, using game theory to analyze strategic situations and demonstrate profitable behaviors of the cooperative entities. The book identifies and explores several significant applications/uses/situations that arise from the vast deployment of the IoT. The presentation of the technological scenarios is followed in each of the first four chaptersby a step-by-step theoretical model often followed by equilibrium proof, and numerical simulation results, that are explained in a tutorial-like manner. The four chapters tackle challenging IoT and 5G related issues, including: new security threats that IoT brings, e.g. botnets, ad hoc vehicular networks and the need for trust in vehicular communications, content repetition by offloading traffic onto mobile users, as well as issues due to new wearable devices that enable data collection to become more intrusive. Teaches how to model a specific communications scenario using game theoretic tools; Explores current trends in communication technology scenarios for 5G and the Internet of Things; Presents new technologies using game theory to analyze strategic situations.