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Descrizione fisica	1 online resource (XIX, 109 p. 26 illus., 15 illus. in color.)
Collana	Signals and Communication Technology, , 1860-4862
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Soggetti	Signal processing Image processing Speech processing systems Computer security System safety
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Preliminaries -- Security attacks and defenses in distributed sensor networks -- A Heuristic defense: A soft isolation algorithm for adversarial decision fusion -- Optimum decision fusion in the presence of Byzantines -- Nearly optimum decision fusion via message passing -- Decision fusion of hidden-Markov observations with synchronized attacks -- Decision fusion with unbalanced priors -- Decision fusion game with incomplete knowledge in a Bayesian setup -- Conclusions.
Sommario/riassunto	This book reviews the most powerful attack strategies and potential defense mechanisms, always approaching the interplay between the Fusion Center and the Byzantines from a game-theoretic perspective. For each of the settings considered, the equilibria of the game and the corresponding payoffs are derived, shedding new light on the achievable performance level and the impact that the presence of the Byzantines has on the accuracy of decisions made by the Fusion Center. Accordingly, the book offers a simple yet effective introduction to the emerging field of adversarial information fusion, providing a wealth of intuitive take-home lessons for practitioners interested in applying the most basic notions to the design of practical systems, while at the

same time introducing researchers and other readers to the mathematical details behind the theory.
