

1. Record Nr.	UNINA9910349472503321
Autore	Vempaty Aditya
Titolo	Secure Networked Inference with Unreliable Data Sources [[electronic resource] /] / by Aditya Vempaty, Bhavya Kailkhura, Pramod K. Varshney
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	9789811323126 981-13-2312-7
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIII, 208 p. 74 illus., 71 illus. in color.)
Disciplina	004.6
Soggetti	Computer communication systems Computer security Electrical engineering Signal processing Image processing Speech processing systems Coding theory Information theory Mathematical statistics Computer Communication Networks Systems and Data Security Communications Engineering, Networks Signal, Image and Speech Processing Coding and Information Theory Probability and Statistics in Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1 Introduction -- Chapter 2 Conventional Inference theories -- Chapter 3 Distributed Detection in Networks -- Chapter 4 Distributed Estimation and Target Localization -- Chapter 5 Distributed Classification and Target Tracking -- Chapter 6 New Research Directions Discussion and conclusions.

Sommario/riassunto

The book presents theory and algorithms for secure networked inference in the presence of Byzantines. It derives fundamental limits of networked inference in the presence of Byzantine data and designs robust strategies to ensure reliable performance for several practical network architectures. In particular, it addresses inference (or learning) processes such as detection, estimation or classification, and parallel, hierarchical, and fully decentralized (peer-to-peer) system architectures. Furthermore, it discusses a number of new directions and heuristics to tackle the problem of design complexity in these practical network architectures for inference.
