

1. Record Nr.	UNINA9910377824403321
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Titolo	Fundamentals of Brooks-Iyengar distributed sensing algorithm : trends, advances, and future prospects / / by Pawel Sniatala, M. Hadi Amini, Kianoosh G. Boroojeni
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , [2020] ©2020
ISBN	3-030-33132-6
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XIX, 202 pages) : 46 illustrations, 42 illustrations in color)
Disciplina	681.2
Soggetti	Electrical engineering Computational intelligence Computer security Application software Communications Engineering, Networks Computational Intelligence Systems and Data Security Information Systems Applications (incl. Internet)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Introduction -- Introduction to Sensor Networks -- Introduction to Algorithms for Wireless Sensor Networks -- Fault Tolerant Distributed Sensor Networks -- Part II Advances of Sensor Fusion Algorithm -- Theoretical Analysis of Brooks-Iyengar Algorithm: Accuracy and Precision Bound -- The Profound Impact of the Brooks-Iyengar Algorithm -- Part III Trends of Brooks-Iyengar Algorithm -- Robust Fault Tolerant Rail Door State Monitoring Systems -- Part IV Applications of Brooks-Iyengar Algorithm for The Next 10 Years -- Decentralization of Data-Source using Blockchain-based Brooks-Iyengar Fusion -- A Novel Fault-Tolerant Random Forest Model using Brooks-Iyengar Fusion -- Designing a Deep-Learning Neural Network chip to detect Hardware Errors using Brooks-Iyengar Algorithm --

Sommario/riassunto

This book provides a comprehensive analysis of Brooks-Iyengar Distributed Sensing Algorithm, which brings together the power of Byzantine Agreement and sensor fusion in building a fault-tolerant distributed sensor network. The authors analyze its long-term impacts, advances, and future prospects. The book starts by discussing the Brooks-Iyengar algorithm, which has made significant impact since its initial publication in 1996. The authors show how the technique has been applied in many domains such as software reliability, distributed systems and OS development, etc. The book exemplifies how the algorithm has enhanced new real-time features by adding fault-tolerant capabilities for many applications. The authors posit that the Brooks-Iyengar Algorithm will continue to be used where fault-tolerant solutions are needed in redundancy system scenarios. Provides a comprehensive investigation of Brooks-Iyengar Algorithm and the recently developed methods based on this algorithm; Specifies the importance and position of theoretical methods in dealing with real-world problems in the context of distributed sensing; Presents basics and mathematical foundations needed to analyze Brooks-Iyengar Algorithm.
