Record Nr. UNINA9910734871703321 Autore Kose Utku Titolo Interpretable Cognitive Internet of Things for Healthcare / / edited by Utku Kose, Deepak Gupta, Ashish Khanna, Joel J. P. C. Rodrigues Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 **ISBN** 3-031-08637-6 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (203 pages) Collana Internet of Things, Technology, Communications and Computing, , 2199-1081 Altri autori (Persone) GuptaDeepak, Ph.D. KhannaAshish RodriguesJoel J. P. C Disciplina 610.28546 Soggetti Telecommunication Biomedical engineering Medical informatics Communications Engineering, Networks Biomedical Engineering and Bioengineering **Health Informatics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- Essentials of Cognitive IoT for Healthcare --Interpretability Problem in IoT for Healthcare -- Transparent and Black-Box IoT Systems for Healthcare -- Evaluation of Cognitive Capabilities of IoT in Healthcare -- Massive Health Data Analytics for Cognitive IoT -- Usability Evaluation of Cognitive IoT for Healthcare -- Hybrid Methods for Interpretable IoT for Healthcare -- Interpretable Cognitive IoT for Pandemics -- Interpretable Cognitive IoT for Cancer --Interpretable Cognitive IoT for Sustainable Massive Health --Interpretable Cognitive IoT for Health Robotics -- Interpretable Cognitive IoT for Personal Healthcare -- Wearables in the Context of IoT for Massive Healthcare -- Security for Massive Health Data Used by Cognitive IoT -- Future Insights for Interpretable Cognitive IoT in

Healthcare -- Conclusion.

Sommario/riassunto

This book presents research on how interpretable cognitive IoT can

work to help with the massive amount of data in the healthcare industry. The authors give importance to IoT systems with intense machine learning features; this ensures the scope corresponds to use of cognitive IoT for understanding, reasoning, and learning from medical data. The authors discuss the interpretability of an intelligent system and its trustworthiness as a smart tool in the context of massive healthcare applications. As a whole, book combines three important topics: massive data, cognitive IoT, and interpretability. Topics include health data analytics for cognitive IoT, usability evaluation of cognitive IoT for healthcare, interpretable cognitive IoT for health robotics, and wearables in the context of IoT for healthcare. The book acts as a useful reference work for a wide audience including academicians, scientists, students, and professionals. Presents research and application of cognitive interpretable data for healthcare; Includes both positive outcomes and negative results of ongoing research into IoT and healthcare; Encourages readers to submit their data or open source software, to create a repository for ongoing study.