1. Record Nr. UNINA9910678106303321 Autore Davies J (N. John) Titolo The internet of things: from data to insight / / John Davies, Carolina Fortuna Pubbl/distr/stampa Hoboken, New Jersey: ,: John Wiley & Sons, Inc., , 2020 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2020] **ISBN** 1-119-54529-3 1-119-54528-5 Descrizione fisica 1 online resource (xvii, 215 pages): Ilustrations Disciplina 004.678 Soggetti Internet of things Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. About the Editors -- List of Contributors -- Acknowledgments -- 1 Nota di contenuto Introduction / John Davies and Carolina Fortuna -- 2 Connecting Devices: Access Networks / Paul Putland -- 3 Edge Computing / Mohammad Hossein Zoualfaghari, Simon Beddus, and Salman Taherizadeh -- 4 Data Platforms: Interoperability and Insight / John Davies and Mike Fisher -- 5 Streaming Data Processing for IoT / Carolina Fortuna and Timotej Gale -- 6 Applied Machine Vision and IoT / V. Garcia, N. Sanchez, J.A. Rodrigo, J.M. Menendez, and J. Lalueza --7 Data Representation and Reasoning / Maria Maleshkova and Nicolas Sevdoux -- 8 Crowdsourcing and Human-in-the-Loop for IoT / Luis-Daniel Ibanez, Neal Reeves, and Elena Simperl -- 9 IoT Security: Experience is an Expensive Teacher / Paul Kearney -- 10 IoT Data Privacy / Norihiro Okui, Vanessa Bracamonte, Shinsaku Kiyomoto, and Alistair Duke -- 11 Blockchain: Enabling Trust on the Internet of Things / Giampaolo Fiorentino, Carmelita Occhipinti, Antonello Corsi, Evandro Moro, John Davies, and Alistair Duke -- 12 Healthcare / Duarte Goncalves-Ferreira, Joana Ferreira, Bruno Oliveira, Ricardo Cruz-Correia, and Pedro Pereira Rodrigues -- 13 Smart Energy / Artemis Voulkidis, Theodore Zahariadis, Konstantinos Kalaboukas, Francesca Santori, and Matev#x9E; Vucnik -- 14 Road Transport and Air Quality /

Carolina Fortuna -- References -- Index

Charles Carter and Chris Rushton -- 15 Conclusion / John Davies and

Sommario/riassunto

"The Internet of Things has been a recurrent theme among commentators since the term was coined in the late 1990s. This term has evolved from Radio Frequency Identifier (RFID) which represented a hardware related break-through that aimed to connect everyday objects in a network. IoT went beyond the initial hardware world innovation, and focused more on developing new types of sensors and sensing materials as well as on developing new communication technologies and protocols. As a result, a wide variety of communication technologies emerged in the 2000s able to support ubiquitous deployment of a wide variety of sensors. In the last decade, the focus of IoT has shifted to the data collection and processing level. Provides a comprehensive overview of the full Internet of Things technology stack with focus on data driven aspects from data modelling, processing to presentation for decision making. Explains how IoT technology is applied in practice and the benefits being delivered. Acquaints readers that are new to the area with concepts. components, technologies and verticals related to and enabled by IoT. Gives IoT specialists a deeper insight to data and decision-making aspects as well and novel application areas"--