1. Record Nr. UNINA9910797002403321 Autore Wang Dong Titolo Social sensing: building reliable systems on unreliable data / / Dong Wang, Tarek Abdelzaher, Lance Kaplan Amsterdam:,: Elsevier,, [2015] Pubbl/distr/stampa ©2015 **ISBN** 0-12-800867-9 Edizione [First edition.] Descrizione fisica 1 online resource (232 p.) Disciplina 302.30285 Soggetti Social media - Data processing Information technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia ""Front Cover""; ""Social Sensing: Building Reliable Systems on Nota di contenuto Unreliable Data""; ""Copyright""; ""Dedication""; ""Contents""; ""Acknowledgments""; ""Authors""; ""Dong Wang""; ""Tarek Abdelzaher""; ""Lance M. Kaplan""; ""Foreword""; ""Preface""; ""Chapter 1: A new information age""; ""1.1 Overview""; ""1.2 Challenges""; ""1.3 State of the Art""; ""1.3.1 Efforts on Discount Fusion""; ""1.3.2 Efforts on Trust and Reputation Systems""; ""1.3.3 Efforts on Fact-Finding""; ""1.4 Organization""; ""Chapter 2: Social Sensing Trends and Applications""; ""2.1 Information Sharing: The Paradigm Shift"" ""2.2 An Application Taxonomy""""2.3 Early Research""; ""2.4 The Present Time""; ""2.5 ANote on Privacy""; ""Chapter 3: Mathematical foundations of social sensing: An introductory tutorial""; ""3.1 AMultidisciplinary Background""; ""3.2 Basics of Generic Networks""; ""3.3 Basics of Bayesian Analysis""; ""3.4 Basics of Maximum Likelihood Estimation"": ""3.5 Basics of Expectation Maximization"": ""3.6 Basics of Confidence Intervals""; ""3.7 Putting It All Together""; ""Chapter 4: Factfinding in information networks""; ""4.1 Facts, Fact-Finders, and the Existence of Ground Truth"" ""4.2 Overview of Fact-Finders in Information Networks"""4.3 A

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Sommario/riassunto

Increasingly, human beings are sensors engaging directly with the mobile Internet. Individuals can now share real-time experiences at an unprecedented scale. Social Sensing: Building Reliable Systems on Unreliable Data looks at recent advances in the emerging field of social sensing, emphasizing the key problem faced by application designers: how to extract reliable information from data collected from largely unknown and possibly unreliable sources. The book explains how a myriad of societal applications can be derived from this massive amount of data collected and shared by average individu