Record Nr. UNINA9910464661903321 Autore Han Zhu <1974-> **Titolo** Compressive sensing for wireless networks / / Zhu Han, University of Houston, USA, Husheng Li, University of Tennessee, USA, Wotao Yin, Rice University, USA [[electronic resource]] Cambridge:,: Cambridge University Press,, 2013 Pubbl/distr/stampa **ISBN** 1-107-23547-2 1-107-33656-2 1-107-33490-X 1-139-08849-1 1-107-33249-4 1-107-33324-5 1-107-33573-6 1-299-70766-1 Descrizione fisica 1 online resource (xiv, 293 pages) : digital, PDF file(s) Disciplina 621.39/81 Soggetti Coding theory Data compression (Telecommunication) Signal processing - Digital techniques Sampling (Statistics) Compressed sensing (Telecommunication) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from publisher's bibliographic system (viewed on 05 Oct 2015). Nota di bibliografia Includes bibliographical references and index. Compressive sensing is a new signal processing paradigm that aims to Sommario/riassunto encode sparse signals by using far lower sampling rates than those in the traditional Nyquist approach. It helps acquire, store, fuse and process large data sets efficiently and accurately. This method, which links data acquisition, compression, dimensionality reduction and optimization, has attracted significant attention from researchers and engineers in various areas. This comprehensive reference develops a

unified view on how to incorporate efficiently the idea of compressive sensing over assorted wireless network scenarios, interweaving

concepts from signal processing, optimization, information theory, communications and networking to address the issues in question from an engineering perspective. It enables students, researchers and communications engineers to develop a working knowledge of compressive sensing, including background on the basics of compressive sensing theory, an understanding of its benefits and limitations, and the skills needed to take advantage of compressive sensing in wireless networks.