Record Nr. UNINA9910438042603321 Digital image forensics: there is more to a picture than meets the eye / **Titolo** / Husrev Taha Sencar, Nasir Memon, editors Pubbl/distr/stampa New York, : Springer, 2012, c2013 **ISBN** 1-4614-0757-5 Descrizione fisica 1 online resource (368 p.) Altri autori (Persone) SencarHusrev Taha MemonNasir 364.4028 Disciplina 364.4028/4 364.40284 Soggetti Electronic evidence Forensic sciences - Technological innovations Virtual computer systems - Security measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Part I: Background on Digital Images -- Digital Camera Image Formation: Introduction and Hardware -- Digital Camera Image Formation: Processing and Storage -- Digital Image -- Searching and Extracting Digital Image Evidence -- Part II: Attributing an Image to its Source -- Image and Video Source Class Identification -- Sensor Defects in Digital Image Forensics -- Identification and Characterization of Physical Defects in Light Path -- Natural Image Statistics in Digital Image Forensics -- Detecting Doctored Images --Discrimination of Computer Synthesized or Recaptured Images from Real Images -- Part III: Digital Image Forensics in Practice -- Courtroom Considerations in Digital Image Forensics -- Counter-Forensics: Attacking Image Forensics. Sommario/riassunto Photographic imagery has come a long way from the pinhole cameras of the nineteenth century. Digital imagery, and its applications. develops in tandem with contemporary society's sophisticated literacy of this subtle medium. This book examines the ways in which digital images have become ever more ubiquitous as legal and medical

evidence, just as they have become our primary source of news and

have replaced paper-based financial documentation. Crucially, the contributions also analyze the very profound problems which have arisen alongside the digital image, issues of veracity and progeny that demand systematic and detailed response: It looks real, but is it? What camera captured it? Has it been doctored or subtly altered? Attempting to provide answers to these slippery issues, the book covers how digital images are created, processed and stored before moving on to set out the latest techniques for forensically examining images, and finally addressing practical issues such as courtroom admissibility. In an environment where even novice users can alter digital media, this authoritative publication will do much so stabilize public trust in these real, yet vastly flexible, images of the world around us.