Record Nr. UNINA9910558485403321 Autore Sencar Husrev Taha Titolo Multimedia forensics / / editors, Husrev T. Sencar, Luisa Verdoliva, Nasir D. Memon Pubbl/distr/stampa Singapore, : Springer, 2022 **ISBN** 981-16-7621-6 Descrizione fisica 1 online resource (xii, 490 pages): illustrations (some color) Collana Advances in computer vision and pattern recognition Altri autori (Persone) SencarHusrev T VerdolivaLuisa MemonNasir D Soggetti Digital forensic science Multimedia systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di contenuto What's In This Book and Why? Media Forensics in the Age of Disinformation Computational Imaging Sensor Fingerprints: Camera Identification and Beyond Source Camera Attribution from Videos Source Camera Model Identification GAN Fingerprints in Face Image Synthesis Physical Integrity Sommario/riassunto This book is an open access. Media forensics has never been more relevant to societal life. Not only media content represents an everincreasing share of the data traveling on the net and the preferred communications means for most users, it has also become integral part of most innovative applications in the digital information ecosystem that serves various sectors of society, from the entertainment, to journalism, to politics. Undoubtedly, the advances in deep learning and computational imaging contributed significantly to this outcome. The underlying technologies that drive this trend, however, also pose a profound challenge in establishing trust in what we see, hear, and read, and make media content the preferred target of malicious attacks. In this new threat landscape powered by innovative imaging technologies and sophisticated tools, based on autoencoders and generative

adversarial networks, this book fills an important gap. It presents a comprehensive review of state-of-the-art forensics capabilities that

relate to media attribution, integrity and authenticity verification, and counter forensics. Its content is developed to provide practitioners, researchers, photo and video enthusiasts, and students a holistic view of the field