

1. Record Nr.	UNINA9910366596103321
Autore	Roy Aniket
Titolo	Digital Image Forensics [[electronic resource]] : Theory and Implementation // by Aniket Roy, Rahul Dixit, Ruchira Naskar, Rajat Subhra Chakraborty
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-10-7644-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XVI, 89 p. 45 illus., 32 illus. in color.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 755
Disciplina	363.252
Soggetti	Signal processing Image processing Speech processing systems Optical data processing Computer crimes Signal, Image and Speech Processing Image Processing and Computer Vision Cybercrime
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Introduction -- Chapter 2: Source Camera Identification Using Statistical Features -- Chapter 3: Copy Move Forgery Detection in Digital Images – A Survey and Analysis -- Chapter 4: Copy–Move Forgery Detection exploiting Statistical Image Features -- Chapter 5: Blur-invariant Copy-move Forgery Detection utilizing SWT-SVD -- Chapter 6: Copy–Move Forgery Detection with Similar but Genuine Objects using Texture Features -- Chapter 7: Conclusions and Future Work.
Sommario/riassunto	This book discusses blind investigation and recovery of digital evidence left behind on digital devices, primarily for the purpose of tracing cybercrime sources and criminals. It presents an overview of the challenges of digital image forensics, with a specific focus on two of the most common forensic problems. The first part of the book addresses image source investigation, which involves mapping an image back to its camera source to facilitate investigating and tracing

the source of a crime. The second part of the book focuses on image-forgery detection, primarily focusing on “copy-move forgery” in digital images, and presenting effective solutions to copy-move forgery detection with an emphasis on additional related challenges such as blur-invariance, similar genuine object identification, etc. The book concludes with future research directions, including counter forensics. With the necessary mathematical information in every chapter, the book serves as a useful reference resource for researchers and professionals alike. In addition, it can also be used as a supplementary text for upper-undergraduate and graduate-level courses on “Digital Image Processing”, “Information Security”, “Machine Learning”, “Computer Vision” and “Multimedia Security and Forensics”.
