1. Record Nr. UNINA9910299564803321

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Titolo	Adaptive Image Processing Algorithms for Printing / / by Ilia V. Safonov, Ilya V. Kurilin, Michael N. Rychagov, Ekaterina V. Tolstaya
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-6931-X
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XVIII, 304 p. 261 illus., 188 illus. in color.)
Collana	Signals and Communication Technology, , 1860-4862
Disciplina	621.367
Soggetti	Signal processing Image processing Speech processing systems Optical data processing Signal, Image and Speech Processing Image Processing and Computer Vision
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Exposure Correction -- High Dynamic Range Imaging -- Image Processing using EXIF metadata -- Adaptive Sharpening -- Global and local noise reduction -- JPEG-artifacts detection and reduction -- Undesired artifact removal -- Red-eye correction -- Closed-Eye detection -- Image interpolation -- Panoramic images -- Smart cropping -- Still image retargeting -- Auto image rotation -- Anaglyph printing -- 3D printing.
Sommario/riassunto	This book presents essential algorithms for the image processing pipeline of photo-printers and accompanying software tools, offering an exposition of multiple image enhancement algorithms, smart aspect-ratio changing techniques for borderless printing and approaches for non-standard printing modes. All the techniques described are content-adaptive and operate in an automatic mode thanks to machine learning reasoning or ingenious heuristics. The first part includes algorithms, for example, red-eye correction and compression artefacts reduction, that can be applied in any photo processing application, while the second part focuses specifically on printing devices, e.g. eco-friendly and anaglyph printing. The majority

of the techniques presented have a low computational complexity because they were initially designed for integration in system-on-chip. The book reflects the authors' practical experience in algorithm development for industrial R&D.