1. Record Nr. UNINA9910710796703321

Titolo	An exploration of the operational ramifications of lossless compression of 1000 ppi fingerprint imagery / / Shahram Orandi
Pubbl/distr/stampa	Gaithersburg, MD : , : U.S. Dept. of Commerce, National Institute of Standards and Technology, , 2012
Descrizione fisica	1 online resource (52 pages) : illustrations, tables
Collana	NISTIR ; ; 7779
Altri autori (Persone)	OrandiShahram
Soggetti	Fingerprints Image compression
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	August 2012 Contributed record: Metadata reviewed, not verified. Some fields updated by batch processes.
Nota di bibliografia	Includes bibliographical references pages 41-42.
Sommario/riassunto	This paper presents the findings of a study initially conducted to measure the operational impact of JPEG 2000 lossy compression on 1000 ppi fingerprint imagery at various levels of compression, but later expanded to include lossless compression. Lossless compression will have no impact on either Galton or non-Galton based features of a fingerprint since the compressed image is identical to the original once decompressed. The selection of a lossless compression algorithm can have operational implications in terms of effective compression rate and throughput; these implications are the focus. This study examines several such compression algorithms and compares them using criteria used to measure the effectiveness of the compression algorithm as well as its throughput using actual fingerprint imagery.