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A steganographic framework for reference colour based encoding and cover image selection.

(English) [Zbl 1044.68614](#)

Pieprzyk, Josef (ed.) et al., Information security. 3rd international workshop, ISW 2000, Wollongong, Australia, December 20–21, 2000. Proceedings. Berlin: Springer (ISBN 3-540-41416-9). Lect. Notes Comput. Sci. 1975, 30-43 (2000).

Summary: Steganography is a method of communication which hides the existence of the communication from a third party. The employment of steganographic techniques depends on various demands, which will be derived and considered. This paper regards different aspects of digital images. These are representation, storage and as a result also suitability for their use in steganography. Based upon this, some criteria for the choice of suitable cover images are pointed out. A new technical steganographic system, which uses reference colours as starting point for embedding and extraction of information has been developed and will be described. This system can be adapted flexibly to different requirements and considers the human visual system as well as the derived statements for potential cover images. Results are described which justify the new approach.

For the entire collection see [\[Zbl 0952.00043\]](#).

MSC:

[68P25](#) Data encryption (aspects in computer science)

[68P30](#) Coding and information theory (compaction, compression, models of communication, encoding schemes, etc.) (aspects in computer science)

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