Abstract

We are undoubtedly living in an age where we are exposed to a remarkable array of visual imagery. Nowadays, accepting digital images of official documents is common practice. Image authenticity is important in many social areas. For instance, the trustworthiness of photographs has an essential role in courtrooms, where they are used as evidence. In the medical field,
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Physicians make critical decisions based on digital images. The technology today makes it convenient to quickly exchange contracts, photographs or other documents. While we may have historically had confidence in the integrity of this imagery, today’s digital technology has begun to erode this trust. With the advent of low-cost and high-resolution digital cameras, and sophisticated photo editing software, digital images can be easily manipulated and altered. It is possible to change the information represented by an image and create forgeries, which are indistinguishable by naked eye from authentic photographs and documents. In the proposed method Harris Interest Point detector along with SIFT descriptors are used to detect copy-move forgery. KD-Tree is used for matching.

Reference

- J. Matas, O. Chum, M. Urban, and T. Pajdla, “Robust Wide Baseline Stereo from
Automated Forensic Method for Copy-Move Forgery Detection based on Harris Interest Points and SIFT Descriptors

- Luo Juan, Oubong Gwun, A Comparison of SIFT, PCA-SIFT and SURF, IJIP, Vol. 3(4), 2009

Index Terms

Computer Science
Security

Key words
Copy-Move Forgery
Harris interest point
SIFT
KD-tree