Abstract

This paper proposes a copyright protection system using multimodal biometrics for content protection of digital images. Two biometric traits, one physiological (face) and one behavioral (offline handwritten signature) of the legitimate owner are used as watermarks. These watermarks are embedded at different levels of resolution to the high frequency wavelet coefficients through optimal control of the embedding factor. Experimental evaluation confirms the imperceptibility and robustness of the scheme against a family of typical image distortions functions like Jpeg Compression, filtering etc as well as geometric attacks such as scaling, rotation and combined attacks.

References

Index Terms

Computer Science

Image Processing

Keywords

multimodal biometrics  lifting wavelet transform  biorthogonal wavelets  structural similarity index measure