

Multimedia Encryption, Transmission and Authentication

Edited by

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Chapter 15

Digital Watermarking : Related work

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15.1 Introduction

Digital watermarking is a huge research area which is progressively growing. It covers theoretical studies, novel techniques, attacks and performance analysis. Over the years, the digital watermarking community has focused on developing new techniques for watermark embedding and detection. Analysis of these techniques leads to methods for attacks and countermeasures which are used to discover faults and limitations in applications, encouraging the development of better ones. Digital watermarking is distinctive depending on its techniques and applications. In general, digital watermarking is distinguished according to media type (image, audio, video and etc.), visibility (visible and invisible), robustness level (fragile, semi-fragile and robust) and the need for original data (blind, semi-blind and non-blind). This chapter consists of literature review and theoretical background. A general model of digital watermarking and its terminology were described as well. Third section concentrates on related work, as this area can be considered relatively new looking at when it started and the progress made so far.

15.2 DIGITAL WATERMARKING: RELATED WORK

Cox et al. (2002) mentioned that it is difficult to determine when digital watermarking was first discussed. It was probably not until early 1990s that the term digital watermarking really began to surface. Based on their findings, the interest in digital watermarking began to expand in year 1995:

- The first Information Hiding Workshop (IHW) included digital watermarking as one of its primary topics was held in 1996.