A NEW VIDEO AUTHENTICATION TEMPLATE BASED ON BUBBLE RANDOM SAMPLING (TueAmPO1)

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Abstract :

In the last decade the rapid growth of the digital video diffusion has caused the arise of important problems in the digital rights management field as well as in other important applications like video authentication. Digital watermarking offers a promising solution against piracy and is therefore a very active area of research. However robustness to data manipulations, either malicious or not, is a demanding task because there are many different types of attacks that can be envisioned. Among these, geometric and temporal distorsions play major roles. The countermeasures against these attacks are an open challenge. In this paper a video authentication template based on bubble random sampling for feature extraction is proposed to prevent content tampering and ensure temporal synchronization. The first results obtained with simple feature extraction are encouraging and this approach is therefore worth further development efforts.

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