

This paper proposes a new copyright protection and video error detection scheme for H.264 video using information embedding technique and turbo coding. There are two categories of information to be embedded into the intra frames of H.264 video at the encoder. These are the turbo coded copyright information and the parity bit of the sums for the non-zero coefficients in 8×8 sub-blocks. These two categories of information are extracted at the H.264 decoder and both can be used to detect transmission errors in intra frames of the video. Finally, the corrupted copyright information can be automatically reconstructed by the turbo decoder. Experimental results show that the proposed scheme can efficiently protect the copyright information and detect more video errors than the H.264 codec.