Detection of Intentional Attacks in Images Based on Watermarking

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Abstract : In this work, an efficient watermarking technique is proposed and can be used for detecting intentional attacks in RGB color images. The proposed technique can be implemented for image authentication and exhibits high robustness against unintentional common image processing attacks. It deploys two measures to discern between intentional and unintentional attacks based on using a quantization-based technique in a modified 2D multi-pyramidal DWT transform. Simulations have shown high accuracy in detecting intentionally attacked regions while exhibiting high robustness under moderate to severe common image processing attacks.