Digital Watermarking for Copyright Owners

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Group 4

Goals

- Tool that allows copyright owners to sign and protect their artwork using digital watermarks.
- Identify the owner of a copyrighted artwork.
- Watermarks resistent to blurring, gaussian noise, lossy compression and other attacks.

Checkpoint and final delivery

For the checkpoint, our goal is:

- implement a framework so that adding new algorithms is an easy task;
- Cox algorithm;
- Discrete Wavelet Transform based algorithm.

For the final delivery, we expect:

- everything proposed in the checkpoint;
- algorithm capable of image recovery.

Project evaluation

Using a set of images with different resolutions (low, medium, high) the evaluation process is:

1. apply digital watermarks with every algorithm we have implemented;
2. simulate the attacks: resampling, JPEG compression, rotation, noise, cropping, low and high pass filters, blur;
3. extract the watermarks from the tampered artwork;
4. compare the watermarks;
5. recover the original image (if the algorithm supports it).