# IMAGE ORIGIN CLASSIFICATION BASED ON SOCIAL NETWORK PROVENANCE


## ABSTRACT

Nowadays a huge amount of multimedia contents is generated in disparate manners with different devices and then uploaded on the Internet. A picture can be acquired and uploaded at the same time on one or more social networks. On the other side, illegal activities are increase rapidly in multiply by misusing such digital images. To avoid that, we have to identify the origin of a digital content and the reconstruction of its history of the digital images.


## EXISTING SYSTEM

During upload or once on-line, they are shared with other known users and, ultimately, played or downloaded. These digital assets, accessible on the Internet, mostly flow through social networks (SN) and constitute a real-time source of information. Just for instance, it is estimated that on average 350 million photos are uploaded daily on *Facebook* and around 60 millions monthly on *Flickr*. Illegal activities are proliferating by misusing such digital contents to achieve various, sometimes ignoble, objectives. In this context, both the identification of the origin of a digital content and the reconstruction of its history are crucial issues for disciplines such as multimedia forensics and security.

## Disadvantages

- Identification of the origin of a digital content and the reconstruction of its history is not possible.
- Crucial issues for disciplines such as multimedia forensics and security are not possible.

## PROPOSED SYSTEM

In this paper, we have proposed a novel methodology to distinguish images coming from different social networks. The main contributions of the actual work are the following:

- the introduction of the usage of feature-based descriptors able to allow a distinction among the processing suffered by the images when uploaded on a specific social network.
- the definition of a technique based on such features which by resorting at trained classifiers is able to identify the social platform of provenance and also to detect the quality factor before uploading.
- the achievement of satisfactory performances in terms of SN source identification.

## Advantages

- It can go back to the original JPEG quality factor the image had before being uploaded on a social network.
- Identification of the origin of a digital content and the reconstruction of its history is possible.
- Crucial issues for disciplines such as multimedia forensics and security are possible.

## SOFTWARE REQUIREMENTS

| | | |
|---|---|---|
| Front-end | : | JSP |
| Back-End | : | MySQL |
| Server | : | Tomcat Server |
| OS | : | WINDOWS 7/above |

## HARDWARE REQUIREMENTS

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|---|---|---|
| PROCESSOR | : | CORE i3 |
| RAM | : | 512MB-2GB |
| HARD DISK | : | 40GB |