

# Revolution in reverse image research

14.02.2017

The software company Intelligent Monitoring & Prognostics (IM&P) GmbH has developed and successfully tested an algorithm that not only finds original images, but also very changed images on the Internet. Thus, the software makes a significant contribution to the protection of copyrights and the fight against fake news.

Our enhanced Reverse Image Search (eRIS) software solution locates in the internet duplicates and also changed images deviating from the original image by symmetry operations (rotations, reflections), affine compressions, colour changes and also dilations.

Our software product consists of an investigation module and a research module, which are both based on a fast algorithm for image characterization. The algorithm is based on structural signatures that are to be understood as a kind of fingerprint of the image content. Formally, the underlying algorithm consists of different signature configurations allowing a very good differentiation of different images. Even through image compression, affine image deformation, uniform changes, rotations and reflections the signatures remain unchanged.

However, due to a recalculation of the colour values of each pixel, by scaling and saturation effects or by complex changes in the colour structure the signature can be weakly distorted. Therefore, the original image and the modified/changed image will be considered to be identical if their signatures are adjacent.

## The software product can be applied to...

- ... enhance the reverse image search
- ... assist in finding the violation of image rights
- ... verify images in false reports (fake news) on social media

## The software product offers the following USPs:

- ... increased quality and efficiency compared with methods of market leaders
- ... high speed due to an efficiently storing of image signatures in databases
- ... recognizes images despite changes

## Test our software online free of charge. Contact us!

Visit us at the CeBIT 2017 at the stand of the state of Saxony-Anhalt: Hall 6, Stand B47

> Download press release including proof of concept based on a test image.

Source: [www.im&p.de](http://www.im&p.de)

## OUR WEBSITE USES COOKIES

Our website uses cookies to provide our services to you. Third party cookies are also used. By giving your approval, you agree that we may use cookies. You can change the cookie settings at any time. jederzeit ändern.

14.02.2017

← previous article

Required Cookies	These cookies are required for the basic functions of the website. Therefore, you cannot deactivate them. No personal data is collected or stored.	next article →
Functional Cookies	These cookies allow us to analyze the website usage so that we can measure and improve its performance. No personal data is collected or stored.	

Add page