

Photographers Could Utilize Sudoku Tech To Copyright Images

Saturday, September 7, 2013 1:20

Share

Tweet 0

Google+

LinkedIn

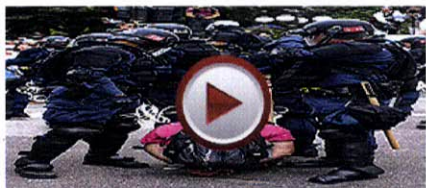
0



KEEP SPIES OUT OF YOUR INBOX.

Unsene currently offers encrypted web messaging, video calls, and file sharing — essentially, an alternative to Skype. —TechCrunch

Try Unsene



(Before It's News)

Peter Suciú for redOrbit.com - Your Universe Online

Sudoku, the logic-based combinatorial number-placement puzzle, often challenges players, but now its layout could be used to solve another problem - theft of copyrighted images.

Shamsul Khalid of the Universiti Tun Hussein Onn Malaysia, in Johor, and his colleagues have created a new watermarking technology that is based on the permutation rules that are used to solve the numerical puzzles known as Sudoku. This could result in a new

FEMA Panicked When This Video Got Leaked!

Watch leaked controversial video before they ban it again

[Watch Video >>](#)

system that could resist attempts to “crop” the watermark in more than ninety percent of attempts.

Images, photos and other graphics posted online can be easily copied or saved by plagiarists and others who simply ignore copyright rules. This has been a growing problem for photographers and others, who have long looked to add a watermark to reduce the risk that their images might be lifted and used on other sites without permission. The problem is that the watermark can affect the composition of a photo or image, and if placed at the side or bottom it can be easily cropped out.

Khalid has looked at the proliferation of digital multimedia content that is available online, and noted that content owners and service providers now need more robust copyright protection technology. One method that has been explored is digital watermarking where specific information can be embedded into the media and which can later be extracted to detect forgery or unauthorized usage while further proving authenticity and provenance.

This embedded information could include a company's logo or product serial number. More importantly, this form of digital watermark could be utilized in a way that does not distort or disrupt display of the image when used in its rightful place and is also imperceptible in use.

Khalid and his colleagues were able to embed a valid 9x9 Sudoku solution, which comprised a pixelated second image, to create a watermark that it is evenly distributed within an image. This is able to resist automated cropping and noise additions by bots and other tools that often lift images for resale or future distribution via illicit databases.