SOFTWARE

IMAGETWIN

24.07.2023

I confess that I worked together with the founder of ImageTwin some years ago, even encouraging him to found a company. I would have even been interested in a further collaboration but unfortunately the company has cut all ties.

Should we really pay now 25€ for testing a single PDF?

price list 2023

My proposal in 2020 was to build an academic community with ImageTwin's keypoint matching approach. AI analysis and image depository would be a nice along with more comprehensive reports than just drawing boxes around duplicated image areas.

A research paper by new ImageTwin collaborators now finds

> Duplicated images in research articles erode integrity and credibility of biomedical science. Forensic software is necessary to detect figures with inappropriately duplicated images. This analysis reveals a significant issue of inappropriate image duplication in our field.

Unfortunately the authors of this paper are missing the integrity nomenclature flagging only images that are expected to look similar.

Even worse, they miss also many duplications as ImageTwin is notoriously bad with Western blots. Sadly, this paper erodes the credibility of forensic image analysis.

Oct 4, 2023

The story continues. Instead of working on a well defined data set and determining sensitivity, specificity, etc. of the ImageTwin approach, another preprint (bioRxiv, Scholar) shows that

> Toxicology Reports published 715 papers containing relevant images, and 115 of these papers contained inappropriate duplications (16%). Screening papers with the use of ImageTwin.ai increased the number of inappropriate duplications detected, with 41 of the 115 being missed during the manual screen and subsequently detected with the aid of the software.

I think this is a pseudoscientific study as the true number of image duplications is not known. We cannot no more verify what ImageTwin does as it is behind a paywall contradicting basic scientific principles. The accompanying news report by Anil Oza makes it even worse.

It is just wrong that the software is “working at two to three times David’s speed” – it is 20 times faster but giving also numerous false positives. It is wrong that “Patrick Starke is one of its developers”(Starke is a sales person not a developer). So at the end, the Oza news report is just a PR stunt as confirmed on Twitter on the next day

https://twitter.com/ImageTwinAI/status/1709842276929728610

Unfortunately ImageTwin has now been fallen back into the same league as Acuna et al. Not unexpected, Science Magazine has choosen Proofig for image testing, despite the nice groupshot of Starke and some other image sleuths.