

The Netherlands Forensic Institute (NFI) is working with software giant Microsoft on a fast-working system to detect child pornography. In preparing cases against people trading in child porn, detectives often have to sift through enormous databases of photographs. That is not only time consuming but also psychologically disturbing. What's more, the amount of images is increasing every year.

In 2009, Microsoft and Dartmouth College jointly developed the [PhotoDNA](#) programme to help combat child pornography. It is used by organisations including Bing, e-mail provider Hotmail and, for the last year, by Facebook. They compare photos uploaded by users with the United States [Child Victim](#)

[Identification Program](#)

. The software is free – Microsoft hopes it will eventually be used all over the world.

Unique code

An image is converted to grey values, covered by a 12 x 12 raster. Each box has its own, unique code. This means an image can be recognised after it has been digitally processed – even if it has been made smaller, blown up or cropped.

More importantly, the programme can match unknown photos with a known series. “That’s especially important in the tracing phase,” explains the NFI’s Erwin van Eijk. It saves time and is of major importance in dismantling paedophile networks. A series or a single image should be able to link the producer and the buyer to each other.

Quick search

Last year, the [NFI](#) approached Microsoft to collaborate in the investigation of the Dutch child pornography database. The NFI is the only government organisation in the world allowed to use PhotoDNA in combination with its own software, which is able to search through the large amounts of data the NFI has amassed. The institute is almost swamped by the increasing amount of information coming in per year, and the increase looks set to continue. The software provided by Microsoft may offer a way of processing it all.

Global standard

“The system still has to be validated,” explains Van Eijk. In theory, a pattern appearing in the raster of a photo from a child-porn series could mirror one from an innocent holiday snap – a false positive. “We have to determine whether it could happen, and if so, how often and under what circumstances.”

When that has been sorted out, the method will be able to be used as evidence in court and may become a global standard in child-porn cases. Microsoft says the chance of a bad match is minimal, but that claim will have to stand up before a judge.

Depressing

Investigating officials, such as those at the NFI, will still have the depressing task of looking through child pornography. PhotoDNA is not a face recognition programme and cannot ‘see’ what is featured in a photograph. This means it cannot be used to trace perpetrators or their victims. Van Eijk expects the first results from the collaboration with Microsoft before the summer.

in: <http://www.rnw.nl/english/article/dutch-test-child-porn-detection-system>