PhotoSketch picture software wins plaudits - Telegraph

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An image manipulation tool built by a group of Chinese students has taken the internet by storm.

PhotoSketch, which transforms basic stick-figure drawings in to a photograph, has been described by technology website Mashable as "mind blowing".

The program, which has been built by five Chinese students at Tsinghua University and the National University of Singapore, uses a vast library of images to turn a basic sketch in to a photograph. A website that allows people to experiment with the software has crashed under the volume of traffic.

In one example of the technology, a basic sketch, showing the rudimentary outlines of some boats, seagulls and a kissing bride and groom, is transformed in to a beautiful image showing an embracing couple against a sunset backdrop. In another, a diagram of a man throwing a Frisbee, and a dog leaping to catch it, is turned into an action-packed picture.

The authors of the tool – Tao Chen, Ming-Ming Cheng, Ping Tan, Ariel Shamir, and Shi-Min Hu – say that the software can take any rough sketch showing the shape of each object, labelled with a name, and find images that correspondent to each element. It can also judge between images to decide which is the best match for the picture, and then stitch all of the elements together in a single image, adding shadows to give a naturalistic look and feel.

"Although online image search generates many inappropriate results, our system is able to automatically select suitable photographs to generate a high quality composition, using a filtering scheme to exclude undesirable images," say the PhotoSketch team in an abstract outlining the tool. "We also provide a novel image blending algorithm to allow seamless image composition. Each blending result is given a numeric score, allowing us to find an optimal combination of discovered images. Experimental results show the method is very successful."

Web users have been quick to point out that the tool is initially most likely to be used to create funny images, perhaps showing celebrities in amusing or compromising positions. But technology experts have been quick to recognise the potential of the software.

"It's early, experimental, and questionably useful, but it's just too cool," writes Devin Coldewey on CrunchGear. "I don't want to be premature here, but I'd say tentatively that this does appear to be the greatest thing of all time."