

# Optical character recognition for graffiti

March 18 2020, by David Bradley

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Researchers in China have recognised that optical character recognition (OCR) has matured and can identify and extract information from documents that use standard writing styles. However, the world over people have very different ways of writing that might remain obscure to OCR. Moreover, people scrawl and gesture on tablets and phones and other devices in ways that are not even close to their normal handwriting and so are likely to be illegible to a computer.

The team has now developed an algorithm that can, with fine granularity, extract information from what might be loosely terms graffiti, convoluted handwriting that might even be indecipherable to some extent to a human reader, let alone a [computer](#).

Jiashuang Xu and Zhangjie Fu of the Computer and Software College at Nanjing University of Information Science and Technology in Nanjing City, Jiangsu Province, and Xingyue Du of the School of Humanities and Social Sciences at Xi'an Polytechnic University in Xi'an City, Shaanxi Province, China, provide details of their approach in the *International Journal of Computational Science and Engineering*.

So far the team has trained their system to recognise 26 letters of the Latin (English) alphabet with almost 86 percent accuracy and are now working on extending and improving the technology. An additional, point is that the system utilizes a motion-detection approach rather than requiring touch input and so could be adapted for non-screen input devices such as wearables, where one might gesture to a [device](#) embedded in clothing, for instance.

**More information:** Jiashuang Xu et al. Graffiti-writing recognition with fine-grained information, *International Journal of Computational Science and Engineering* (2020). [DOI: 10.1504/IJCSE.2020.105721](https://doi.org/10.1504/IJCSE.2020.105721)

Provided by Inderscience

Citation: Optical character recognition for graffiti (2020, March 18) retrieved 26 April 2024 from <https://techxplore.com/news/2020-03-optical-character-recognition-graffiti.html>

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