Abstract

This article shows an easy and simple approach to recognize characters in CAPTCHA images, where the k-NN (k nearest neighbor) algorithm is employed. This proposal to recognize characters in CAPTCHA images has the objective of autofill these components in order to support automation of access to systems. The main aim of this article is to show the steps involved in the proposed process about automatic filling CAPTCHAs since the image’s handling until the classification of the characters through a simple and low-cost (implementation) technique of pattern recognition. Experimental results and an error distribution about the characters' classification are showed, where it is demonstrated the possibility of application in real cases of the proposal presented.

References

1. Karmand Abdalla and Mehmet Kaya. An evaluation of different types of captcha:


6. Haichang Gao, Jeff Yan, Fang Cao, Zhengya Zhang, Lei Lei, Mengyun Tang, Ping Zhang, Xin Zhou, Xuqin Wang, and Jiawei Li. A simple generic attack on text captchas. In Network and Distributed System Security Symposium (NDSS), San Diego, USA, 2016.


17. Luis Von Ahn, Manuel Blum, Nicholas J Hopper, and John Langford. Captcha: Using


Index Terms

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Keywords

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