## World Academy of Science, Engineering and Technology International Journal of Computer and Information Engineering Vol:14, No:11, 2020

## **Application of Signature Verification Models for Document Recognition**

Authors: Boris M. Fedorov, Liudmila P. Goncharenko, Sergey A. Sybachin, Natalia A. Mamedova, Ekaterina V. Makarenkova, Saule Rakhimova

**Abstract :** In modern economic conditions, the question of the possibility of correct recognition of a signature on digital documents in order to verify the expression of will or confirm a certain operation is relevant. The additional complexity of processing lies in the dynamic variability of the signature for each individual, as well as in the way information is processed because the signature refers to biometric data. The article discusses the issues of using artificial intelligence models in order to improve the quality of signature confirmation in document recognition. The analysis of several possible options for using the model is carried out. The results of the study are given, in which it is possible to correctly determine the authenticity of the signature on small samples.

Keywords: signature recognition, biometric data, artificial intelligence, neural networks

Conference Title: ICDAR 2020: International Conference on Document Analysis and Recognition

**Conference Location :** Jerusalem, Israel **Conference Dates :** November 26-27, 2020