

Modern Applied Science 2015 vol.9 N1, pages 137-148

---

## About one method of on-line signature verification using radial basis function

Anisimova E., Ibatullin R.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

---

### Abstract

© 2014 by the author(s). The article is devoted to the study of a possibility of on-line signature verification using the wavelet transform with the radial basis function. Representation of the signature in the form of function, invariant concerning a position, - the signature is replaced by a broken curve and is described using the angles between the adjacent links - is offered. Using the wavelet transforms for the signature description, comparison of expansion coefficients of functions of signatures by the radial basis function to verify signatures is described in detail. In the result of application of the offered method the magnitude of error of first kind has made 4.4%, the magnitude of error of second kind - 2.8%.

<http://dx.doi.org/10.5539/mas.v9n1p137>

---

### Keywords

On-line signature, Radial basis function, Verification, Wavelet transform