

Turkish Journal of Electrical Engineering & Computer Sciences

Turkish Journal

of

Offline Signature Verification Using Graph Matching

Electrical Engineering &
Computer Sciences

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 [Keywords](#)
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Abstract: In this paper, we present a simple and effective signature verification method that depends only on the raw binary pixel intensities and avoids using complex sets of features. The method looks at the signature verification problem as a graph matching problem. The method is tested using genuine and forgery signatures produced by five subjects. An equal error rate of 26.7% and 5.6% was achieved for skilled and random forgeries, respectively. A positive property of our algorithm is that the false acceptance rate of random forgeries vanishes at the point of equal false rejection and skilled forgery false acceptance rates. Keeping the normalization size at 32 x 64 pixels makes the verification time in the two seconds range.

Key Words: Offline Signature Verification, Graph Matching, Thinning, Normalization

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Turk. J. Elec. Eng. & Comp. Sci., **15**, (2007), 89-104.

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