

Abstract:

Comparison of signatures is part of the identity verification. The study focuses on comparison of signatures using metrics for the eye movements. In first part of study we review algorithms for the signature verification and we introduce metrics for comparing eye movements. We used Levenshtein distance, Fréchet distance and correlation coefficient for the comparison of signatures. We discovered behavior of these metrics and choose their combination for the computation of percentage similarity between two signatures. We designed and implemented universal Windows application which digitizes signatures, compares two signatures and determines their similarity. We conducted an experiment in which participants tried to sign themselves or tried to sign someone else. We did not find improvement during the signing.