

# Signature Matching using Key Point Descriptors

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**Abstract:** *This report presents the implementation of a CNN which aims to classify and verify the authenticity of the offline signatures, using the writer-independent method based on ORB features. In order to develop this work, 2 databases (training/validation and testing) were built manually, i.e., the manual collection of the signatures of the 3 users as well as forged signatures made by people not belonging to the base and altered by the same users were done, and signatures of another 115 people were used to create the category of non-members. Once the network is trained, its validation and subsequent testing is performed, obtaining overall accuracies of 85.4%, showing the features learned by the network and verifying the ability of this configuration of neural network to be used in applications for identification and verification of offline signatures.*

**Keywords:** Signature Matching

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