

**Title of Article:** Vertical Off-line Signature Feature Block for Verification

**Author(s):** S. Adebayo Daramola, Joke Badejo, Isaac Samuel and Tola Sokunbi

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**Abstract:** Handwritten signature image is normally used as a mark of endorsement of written document. Signatures of the same person vary and they can be forged by imposters. Effective feature extraction algorithm is needed in off-line signature verification. Robust features capable of increases interpersonal variation and decreases intra personal variation are required. This work presents robust signature feature that can be used to build effective off-line signature verification system. Signature processing is performed and the preprocessed signature image is vertically divided into sixteen smaller image blocks through the center of gravity. Three features are extracted from these smaller image blocks. Feature vector is formed and are passed to Support Vector Machine (SVM) for training and classification. The proposed signature feature vector increases the accuracy of tested off-line signature verification system.

**KeyWords:** - *Vertical signature image; centre of gravity; Support Vector Machine.*