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A New Scheme for Chain Code Normalization in Arabic and Farsi Scripts

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Abstract : This paper presents a structural correction of Arabic and Persian strokes using manipulation of their chain codes in order to improve the rate and performance of Persian and Arabic handwritten word recognition systems. It collects pure and effective features to represent a character with one consolidated feature vector and reduces variations in order to decrease the number of training samples and increase the chance of successful classification. Our results also show that how the proposed approaches can simplify classification and consequently recognition by reducing variations and possible noises on the chain code by keeping orientation of characters and their backbone structures.

Keywords: Arabic, chain code normalization, OCR systems, image processing

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