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An Architecture Based on Capsule Networks for the Identification of Handwritten Signature Forgery

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Abstract : Handwritten signature is a unique form for recognizing an individual, used to discern documents, carry out investigations in the criminal, legal, banking areas and other applications. Signature verification is based on large amounts of biometric data, as they are simple and easy to acquire, among other characteristics. Given this scenario, signature forgery is a worldwide recurring problem and fast and precise techniques are needed to prevent crimes of this nature from occurring. This article carried out a study on the efficiency of the Capsule Network in analyzing and recognizing signatures. The chosen architecture achieved an accuracy of 98.11% and 80.15% for the CEDAR and GPDS databases, respectively.

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