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Feedback-based architecture for reading courtesy amounts on checks

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Abstract-

The processing of bank checks is one application that continues to rely heavily on the movement of paper. Checks are currently read by human eyes and physically transported to the bank of the payer, involving significant time and cost. Since paper checks constitute a popular mechanism for noncash payments, and the volume of checks continues to be high, there is a significant interest in the banking industry for new approaches that can read paper checks automatically. We proposed a new approach to read the numerical amount field on the check; this field is also called the courtesy amount field. In the case of check processing, the segmentation of unconstrained strings into individual digits is a challenging task because one must accommodate special cases involving connected or overlapping digits, broken digits, and digits physically connected to a piece of stroke that belongs to a neighboring digit. The described system involves three stages: the segmentation of the string into a series of individual characters, the normalization of each isolated character, and the recognition of each character based on a neural network classifier.

Index Terms-

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