An Approach for Reducing Morphological Operator Dataset and Recognize Optical Character Based on Significant Features

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Abstract : Pattern Matching is useful for recognizing character in a digital image. OCR is one such technique which reads character from a digital image and recognizes them. Line segmentation is initially used for identifying character in an image and later refined by morphological operations like binarization, erosion, thinning, etc. The work discusses a recognition technique that defines a set of morphological operators based on its orientation in a character. These operators are further categorized into groups having similar shape but different orientation for efficient utilization of memory. Finally the characters are recognized in accordance with the occurrence of frequency in hierarchy of significant pattern of those morphological operators and by comparing them with the existing database of each character.