Abstract

Nowadays, scene text recognition has become an important emerging area of research in the field of image processing. In image processing, character recognition boosts the complexity in the area of Artificial Intelligence. Character recognition is not easy for computer programs in comparison to humans. In the broad spectrum of things, it may consider that recognizing patterns is the only thing which humans can do well and computers cannot. There are many reasons including various sources of variability, hypothesis and absence of hard-and-fast rules that define the appearance of a visual character. Hence; there is an unavoidable requirement for heuristic deduction of rules from different samples. This review highlights the superiority of artificial neural networks, a popular area of Artificial Intelligence, over various other available methods like fuzzy logic and genetic algorithm. In this paper, two methods are listed for character recognition – offline and online. The “Offline” methods include Feature Extraction, Clustering, and Pattern Matching. Artificial neural networks use the static image properties. The online methods are divided into two methods, k-NN classifier and direction based algorithm. Thus, the scale of techniques available for scene text recognition deserves an admiration. This
review gives a detail survey of use of artificial neural network in scene text recognition.

References


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Index Terms

Computer Science
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Keywords

Character Recognition, Scene text recognition, Text extraction, Feature extraction, Artificial Neural Network.