

ABSTRACT

Artificial intelligence is wide spread and is becoming the new norm due to its integration in everyday life activities. Milestones are being achieved in the effort to make computers as intelligent as human beings and more research and resources are being poured into the artificial intelligence pipeline. Machine learning is a subset of the larger artificial intelligence as it deals with as the word states “learning of machines”. Dozens of algorithms have been developed over the years in the past decades in an effort to ease the machine learning process and to enhance efficiency. Character recognition is one the largely researched fields with multiple scholars and experts in the field trying to fine-tune the already existing algorithms so as to make them better at their tasks. Hand-written characters can sometimes be problematic even human beings based on several issues such as legibility. In order to gain better results multiple algorithms can be combined together to increase the accuracy and efficiency of task handling. Handwritten character recognition is one of the practically important issues in pattern recognition applications. The applications of digit recognition includes in postal mail sorting, bank check processing, form data entry, etc. The heart of the problem lies within the ability to develop an efficient algorithm that can recognize hand written digits and which is submitted by users by the way of a scanner, tablet, and other digital devices. This paper presents an approach to off-line handwritten digit recognition based on different machine learning technique