

ABSTRACT

Humans can see and visually sense the world around them by using their eyes and brains. Computer vision works on enabling computers to see and process images in the same way that human vision does. Several algorithms developed in the area of computer vision to recognize images. The Handwritten Digit Recognition problem becomes one of the most famous problems in machine learning and computer vision applications.

The goal of our work will be to create a model that will be able to identify and determine the handwritten digit from its image with better accuracy. We aim to complete this by using the concepts of “Convolutional Neural Network” in Deep Learning. Images of digits were taken from a variety of scanned documents, normalized in size and centered. It is a digit recognition task. As such there are 10 digits (0 to 9) or 10 classes to predict. Using MNIST database and compiling with the CNN gives the basic structure of project development. To perform the model we need some libraries such as NumPy, Pandas, TensorFlow, Keras.