[0066] In some non-limiting embodiments or aspects, the trained AI technique may include at least one of a deep learning model-based convolution neural network, Long-Short Term Memory (LSTM), and the like. The AI technique is trained by adapting one or more parameters of the AI technique using a supervised learning technique. The computing unit provides the recognized one or more characters (105) to one or more applications in the device (102). The one or more applications may perform one or more actions using the recognized one or more characters (105). For example, the one or more applications may include at least one of a payment application, e-commerce application, and the like. The one or more actions performed by the one or more applications may include at least one of initiating a payment transaction, displaying the recognized one or more characters (105) to the user (101) using the user interface of the device (102) as shown in Fig. 1, autofill a payment information using the recognized one or more characters (105), and the like.

[0067] Fig. 2 shows a simplified block diagram of a computing unit (200) for character recognition from an image of a payment card (103), in accordance with some non-limiting embodiments or aspects of the present disclosure. In some non-limiting embodiments or aspects, the computing unit (200) may include at least one Central Processing Unit (“CPU” or “processor”) (201) and a memory (202) storing instructions executable by the at least one processor (201). The processor (201) may comprise at least one data processor for executing program components for executing user or system-generated requests. The memory (202) is communicatively coupled to the processor (201). The computing unit (200) further comprises an Input/ Output (I/O) interface (203). The I/O interface (203) is coupled with the processor (201) through which an input signal or/and an output signal is communicated. In some non-limiting embodiments or aspects, the data stored in the memory (202) may include image data (204), ROI data (205), and other data (206).

[0068] In some non-limiting embodiments or aspects, the image data (204) may include at least one of image of the payment card (103) captured by the device (102), derivative of the image, one or more details associated with the payment card (103), filter values of the kernel, and the like. The image of the payment card (103), the derivative of the image, and the filter values of the kernel are represented in the form of a matrix. The one or more details include at least one of a dimension of the payment card (103), a spatial location of the one or more ROIs, a presence and a spatial location of a microchip, a presence and a spatial location of a logo, and the like. For

technique, wherein a desired output of the AI technique for the plurality of characters is known. Further, the computing unit (200) compares output of the AI technique with the desired output. Furthermore, the computing unit (200) adapts one or more parameters of the AI technique using a supervised learning technique based on the comparison of the output of the AI technique with the desired output. The person skilled in the art may appreciate the use of one or more architectures of the convolution neural network and one or more supervised learning algorithms for training the AI technique to recognize the one or more characters (412).

[0084] In some non-limiting embodiments or aspects, the computing unit (200) provides the one or more characters (412) extracted from the one or more ROIs (410) as an input to a trained AI technique (413). The output of the trained AI technique (413) includes the recognized one or more characters (105) as shown in Fig. 4I. The computing unit (200) provides the recognized one or more characters (105) to the one or more applications for performing the one or more actions. For example, the one or more applications may include at least one of a payment application, e-commerce application, and the like. The one or more actions performed by the one or more applications may include at least one of initiating a payment transaction, displaying the recognized one or more characters (105) to the user (101) using the user interface of the device (102), as shown in Fig. 1, autofill a payment information using the recognized one or more characters (105), and the like.

[0085] The method of character recognition in the payment card (103) is used for extracting and recognizing the one or more characters from the plurality of characters (104) in an image (401) of the payment card (103). The character recognition may be performed on one or more types (for example, printed card, embossed card, and the like) of the payment card (103). Further, the character recognition is performed accurately under poor lighting conditions and in images with low contrast and/or brightness. Furthermore, the character recognition is performed accurately in a payment card with decorated images/pattern in the background. The character recognition of the one or more characters in different standard fonts is accurately recognized.

[0086] Fig. 5 illustrates a block diagram of an exemplary computer system (500) for implementing embodiments consistent with the present disclosure. In some non-limiting embodiments or aspects, the computer system (500) may be used to implement the method for character recognition in the image (401) of the payment