A handwritten character recognition system using multilayer Feedforward neural network is proposed in this paper. The character data set suitable for recognizing postal addresses contains 38 elements which include 26 alphabets, 10 numerals and 2 symbols. Fifteen different handwritten data sets were used for training the neural network for classification and recognition of the characters. Three different orientations, namely, horizontal, vertical and diagonal directions are used for extracting 54 features from each character. The trained neural recognition system is tested for various inputs and found to perform well. The diagonal orientation for feature extraction is identified to be the most suitable method as it yields higher recognition accuracy. The proposed system will aid applications for postal/parcel address recognition and conversion of any handwritten document into structural text form.
Reference


Index Terms

Computer Science

Pattern Recognition
**Key words**

- Handwritten character recognition
- Image processing
- Feature extraction
- Feed forward neural networks