

## **HANDWRITTEN CHARACTER RECOGNITION USING NEURAL NETWORK WITH FOUR, EIGHT, & TWELVE DIRECTIONAL FEATURE EXTRACTION TECHNIQUES**

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### **ABSTRACT**

This paper research on handwritten character recognition. For character recognition to achieve the better accuracy is important. By using the neural network and feature extraction the recognition is achieved. Before lots of work has done on English character relatively less work has done in Kannada character. This paper proposes the HCR using English, Kannada & Digit characters by using four, eight, twelve directional feature extraction techniques and comparing in detail with gradient extractions values.

**KEYWORDS:** Back Propagation Neural Network, Classification Rate, Directional Feature Extraction Techniques, Gradient Feature Extraction Techniques, MPLN Using Back Propagation, Recognition Rate