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A Multi-scale Deep Quad Tree Based Feature Extraction Method for the Recognition of Isolated Handwritten Characters of popular Indic Scripts

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Highlights

- A novel multi-column multi-scale convolutional neural network (MMCNN) based architecture has been proposed
- A deep quad-tree based staggered prediction model has also been added with the model for recognition with SVM
- A Multiple level tree network is used increases the recognition rate as it votes through the softmax probabilities of all quadrants or decahexadrants than a single CNN.
- The proposed techniques has been evaluated on 10 publicly available datasets of isolated handwritten characters or digits including MNIST
- Promising results have been achieved by the proposed system for all of the datasets.

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