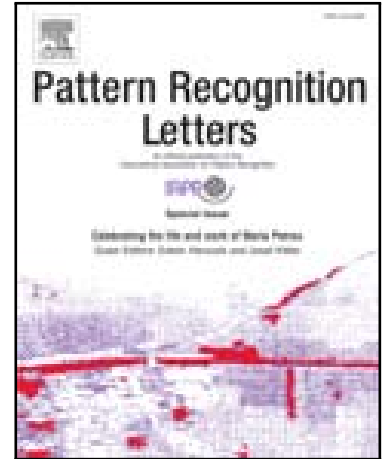


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Data augmentation and directional feature maps extraction for in-air handwritten Chinese character recognition based on convolutional neural network

Xiwen Qu, Weiqiang Wang, Ke Lu, Jianshe Zhou

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Highlights

- We construct a 9-layer convolutional neural network (CNN) for in-air handwritten Chinese character recognition.
- We propose bend directional feature maps and integrate the combination of various directional feature maps with the CNN.
- We propose a new data augmentation method to train the CNN.
- Experiments are conducted on the IAHC-UCAS2016 dataset, an in-air handwritten Chinese character dataset built by us.

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