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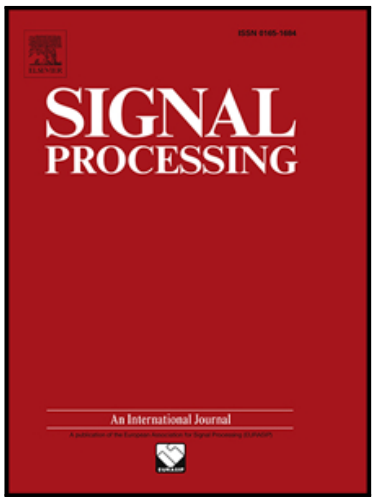

Recurrent Attention Network using Spatial-temporal Relations for Action Recognition

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Highlights

- We propose a new attention mechanism that leverages the gate system of RNNs to compute the attention weights, which can explore the relations between different local parts. For more currency attention, we derive a new attention unit from the standard LSTM unit so as how important the local part is only depends on the value of its input gate.
- We apply our proposed attention mechanism for action recognition. Experiments shows that our method achieves significant improvements compared with other attention models.
- Our proposed attention mechanism can also be applied for many other problems, such as action detection in untrimmed videos, image or video captioning.

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