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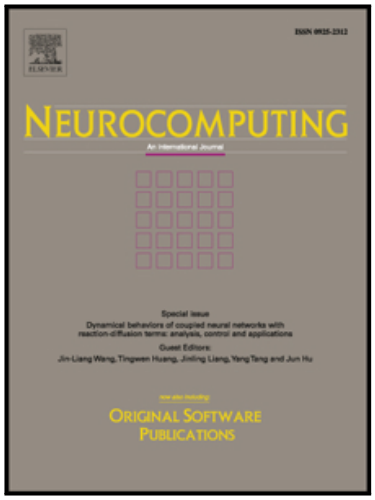

New single-image Super-resolution reconstruction using MRF model

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Highlights

- Learning-based single-image super-resolution using MRF model and BP algorithm.
- Formulates the estimation of the HR image patches as MAP problem.
- Spatial inter-relationships between image patches are learned via the MRF model.
- Spatiogram based matching for the selection of efficient training set.
- Epitomic representation of training patches to provide compact search space for searching of candidate patches.
- Searching of candidate patches is robust to noise and outliers.
- The compatibility functions are smoothness adaptive.
- High quality solution with reduced computational complexity.