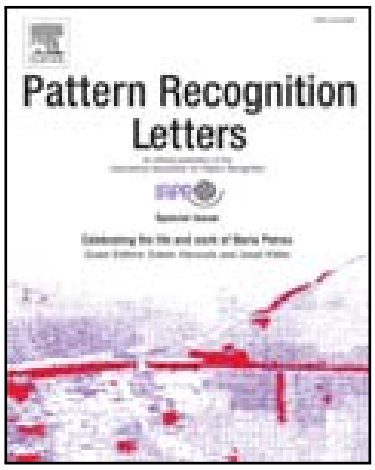

Split and merge algorithm for deep learning and its application for additional classes

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Highlights

- We present a novel GA based feature extractor for network optimal initialization.
- Our method selects more dominant feature extractor in merge phase using GA.
- Results show improvements recognition performance in comparison with DBNs.
- We also suggest a new approach for retraining additional classes as its application.
- Our approach for retraining can add output classes at lower error rate than DBNs.