

Combining Adaptive Vector Quantization and Prototype Selection Techniques to Improve Nearest Neighbour Classifiers.

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Abstract: Prototype Selection (PS) techniques have traditionally been applied prior to Nearest Neighbour (NN) classification rules both to improve its accuracy (editing) and to alleviate its computational burden (condensing). Methods based on selecting/discarding prototypes and methods based on adapting prototypes have been separately introduced to deal with this problem.

Different approaches to this problem are considered in this paper and their main advantages and drawbacks are pointed out along with some suggestions for their joint application in some cases.

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