

FUZZY DECISION TREES, AN IMPLEMENTATION OF ANFIS AND SDT.

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Abstract. This work describe and validate an implementation in R of two algorithms that combine concepts of fuzzy logic and decision trees, these are data mining methods of automatic knowledge extraction from large data bases in classification and regression tasks. They are an extension of the classical crisp tree induction where fuzzy logic is embedded into the induction process with the effect of more accurate models, but still interpretable.

The implemented methods and a classical crisp tree technique (CART) are applied to two datasets from the literature, and the results are shown using cross validation.

Keywords fuzzy decision tree, approximate reasoning, automatic learning, cross validation, data mining