



# Measuring Diversity and Accuracy in ANN Ensembles\*

\***Note:** The full contents of this paper have been published in the volume *Lecture Notes in Artificial Intelligence 11160* (LNAI 11160)

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**Abstract**—Performance of classifier ensembles depends on the precision and on the diversity of the members of the ensemble. In this paper we present an experimental study in which the relationship between the accuracy of the ensemble and both the diversity and the accuracy of base learners is analyzed. We conduct experiments on 8 different ANN ensembles and on 5 multiclass data sets. Experimental results show that a high diversity degree among the base learners does not always imply a high accuracy in the ensemble.

**Index Terms**—Ensemble of classifiers, Diversity, Accuracy, ANN