



**RESEARCH ARTICLE**

## **Decorate Ensemble of Artificial Neural Networks with High Diversity for Classification**

Mittal C. Patel<sup>1</sup>, Prof. Mahesh Panchal<sup>2</sup>, Himani P. Bhavsar<sup>3</sup>

<sup>1</sup>PG Student, India

<sup>2</sup>Head of the Computer Engineering, India

<sup>3</sup>PG Student, India

<sup>1</sup> [Me.mittal87@gmail.com](mailto:Me.mittal87@gmail.com); <sup>2</sup> [mkhpanchal@gmail.com](mailto:mkhpanchal@gmail.com); <sup>3</sup> [himani411@gmail.com](mailto:himani411@gmail.com)

---

***Abstract— An important data mining task is classification which is used to predict target categories of data instances. DECORATE is one of the most popular ensemble learning techniques, and can use strong learner to build diverse committees in a straightforward strategy. Artificial Neural networks (ANN) are very flexible with respect to incomplete, missing and noisy data and also makes the data to use for dynamic environment. ANN is dependent on how best is the configuration of the net in terms of number of weights, neurons and layers. In this paper, DECORATE with ANN as a base classifier is used to classify data from UCI repository. An experiment is conducted on the public datasets, and the analysis results show that the DECORATE ensemble of ANN improves the performance of classification obviously.***

***Key Terms: - Artificial neural network; Classification; Classifier; DECORATE Ensemble; Diversity; Neural Network Ensembles; UCI Datasets.***

---

Full Text: <http://www.ijcsmc.com/docs/papers/May2013/V2I5201345.pdf>