

KMSI values of 0.026347, 0.026073, 0.025819 respectively were observed in the hybrid learning process at 150 epochs. The ANFIS processes faster and have a minimal error of 0.026344 at 300 epochs.

Average error of 0.047283 was observed in the hybrid algorithm against the average error of 0.024642 with hybrid learning at 300 epochs. Therefore, ANFIS evaluation of NFDTRS with hybrid learning performed better than the FIS evaluation.

16. RESEARCH CONTRIBUTION

The main contribution of my study is that my IR-ANFIS system succeeded in enhancing the results achieved by previous IR systems which used fuzzy logic. As one can see, system proved to outperform IR-FIS and other industry standard search engines.

Secondly, my contribution is the discovery that the standard use of Neuro-Fuzzy techniques as it is used in other fields slightly improved the performance in the information retrieval field.

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