

Computational Mathematics and Machine Learning Techniques for Data Analysis of Different Domain

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ABSTRACT

Classification, prediction and feature selection of big data is a key part of data analysis, soft computing and machine learning for further analysis like building the model according to the requirement of the problem. Recently, for extracting the knowledge from big data of different domain, data analysis with soft computing techniques is very helpful. The designing of an optimal framework for resolving the problem is challenging job in the field of machine learning. There are so many techniques such as machine learning techniques for different tasks, but it is unclear which of these techniques perform best with different domains and data sets. The advanced mathematical and Machine learning techniques like, FEM, FVM, FDM, BEM, Fourier series, Laplace transform and Special functions etc., and machine learning techniques like ANN, SVM, NB, Deep learning, different nature inspired algorithm and different bioinspired algorithm will be employed for the solution of different problem. The numerical and computational results will be used to analyse the solution under various limitation and conservation conditions.

Keyword: FEM, FVM, FDM, BEM Fourier series; Machine learning; Soft Computing and Nature inspired algorithm.