

Using Optimization Algorithms to Select Parameters of Support Vector Regression

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ABSTRACT

Organized approaches in selection support vector regression (SVR) parameters are lacking. Furthermore, the determination of SVR parameters affects the prediction accuracy a lot. This research applied four algorithms, namely Ant colony system, Tabu search, Immune algorithm and Particle swarm optimization to choose SVR parameters. For each algorithms, the forecasting errors are treated as objective functions. In additional, many examples from real word are used to demonstrate the performance of the proposed models

Keywords : Support vector machine(SVM) ; Support vector regression(SVR) ; Ant colony system ; Tabu search ; Immune algorithm ; Particle swarm optimization ; system

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