Abstract

Nonlinear regression is a type of regression which is used for modeling a relation between the independent variables and dependent variables. Finding the proper regression model and coefficients is important for all disciplines. In this study, it is aimed at finding the nonlinear model coefficients with two well-known population-based optimization algorithms. Genetic Algorithms (GA) and Particle Swarm Optimization (PSO) were used for finding some nonlinear regression model coefficients. It is shown that both algorithms can be used as an alternative way for coefficients estimation of nonlinear regression models.

References


Nonlinear Regression using Particle Swarm Optimization and Genetic Algorithm


Index Terms

Computer Science
Algorithms

Keywords

Nonlinear regression, Genetic Algorithm, Particle Swarm Optimization