

Abstract

Crude oil is the main source of energy that is needed in the whole world which is a very important commodity. So perubahan crude oil prices affects the state of a country is the way the economy in the country. For that a crude oil price prediction system is needed for making economic policy in a country.

To predict the price of oil is based on the data can be done with particle swarm optimization (CSO) is a method of training a multi-layer perceptron (MLP). CSO is an algorithm that mimics the behavior of a set of cat behavior. There are two important parts of CSO namely tracing mode and seeking mode.

At the end of this task will be the implementation of CSO on the MLP algorithm on a case study of time series data in world crude oil prices, and will perform analysis to obtain the best architecture and parameters.

Keywords: crude oil, prediction, multi-layer perceptron, particle swarm optimization, tracing mode and seeking mode.