ABSTRACT

Gold plays an important role in the world economy because it has many uses, including as a protective asset, currency guarantees and others. Some reasons to invest in gold is gold more resistant to inflation and immune to the political intervention. Basicilly the price of gold fluctuates daily moves and therefore required a system that can predict the movement of the gold price to assist investors in analyzing and appropriate action so that the risk can be optimized diminamilisir and return .

In this final project , a softwarethat will predict gold price movements will be built using technical analysis approach that implemented using memetic algorithm . The algorithm was first introduced by Pablo Moscato in 1989, this is a combination of genetic algorithm and local search algorithms . Memetic algorithm are used as a basic framework becauseof memetic algorithm has higher complexity compared with genetic algorithm (for a given domain) due to memetic algorithm has local search method to reduce the possibility of premature convergence fitness value so that it can overcome the problem of premature convergence ..

The database that is used in this Final Project using historical data of Emas Antam movement which refer to www.portalreksadana.com. at 2009 to 2014 period. Parameter that will be tested is the influence of the number of chromosomes in a population of fitness value to be generated.

Key Word : Gold Price Forecasting, Memetic Algorithm, Genetic Algorithm, Local Search Algorithm, Tabu Search, Antam Gold.