

ABSTRACT

CLASS-BASED DISTRIBUTED EVOLUTIONARY ALGORITHM FOR ASSET MANAGEMENT AND TRADING

A server computer and a multitude of client computers form a network computing system that is scalable and adapted to continue to evaluate the performance characteristics of a number of genes generated using a software application. Each client computer continues to periodically receive data associated with the stored genes stored in its memory. Using this data, the client computers evaluate the performance characteristic of their genes by comparing a solution provided by the gene with the periodically received data associated with that gene. Accordingly, the performance characteristic of each gene may be updated and varied with each periodically received data. The performance characteristic of a gene defines its fitness. The genes may be virtual asset traders that recommend trading options. The genes may be assigned initially to different classes to improve convergence but may later be decided to merge with genes of other classes to improve diversity.

Figure 2