

Generalized nets, ACO-algorithms and genetic algorithm

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In a series of papers it was shown that the functioning and the results of the work of different types of Genetic Algorithms (GAs) and ACO-Algorithms (ACOAs) can be described by Generalized Nets (GNs). Let the GN, that describes any GA, be G_{GA} and the GN that describes any ACOA be G_{ACOA} . In the paper we will construct the GN G that contains G_{GA} and G_{ACOA} as subnets and synchronizes their functioning. The so described GN G is constructed to implement the following process. A predefined number of chromosomes are generated by subnet G_{ACOA} . They are then evaluated by G according to certain criteria and further passed to subnet G_{GA} where they will be used as initial population.