عنوان مقاله:

Adaptive Genetic Algorithms Based on Learning Classifier Systems

محل انتشار:

نهمین کنفرانس سالانه انجمن کامپیوتر ایران (سال: 1382)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Genetic Algorithms (GA) emulate the natural evolution process and maintain population of potential solutions to a given problem. But GA uses static configuration parameters such as crossover type, crossover probability and selection operator, among those, to emulate this inherently dynamic process. Because of dynamic behavior of GA and changes in population parameters in each generation, using adaptive configuration parameters sounds a good idea. This idea is considered in some researches about GA [1, 2, 3, and 4] by various authors. In this research a new modified structure for GA is introduced which called Adaptive GA based on Learning classifier systems (AGAL). AGAL uses a learning component to adapt its structure as population changes. This learning component uses domain knowledge which is extracted from the environment to adapt GA parameter settings.

کلمات کلیدی:

Genetic Algorithms, Learning Classifier Systems, Crossover Operators, Adaptive Genetic Algorithms

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