



Genetic Algorithms Theories and Applications

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Genetic Algorithms (GAs) are widely applied to underlie complex optimization techniques. Genetic Algorithms is one of the most successful and widely used Evolutionary Algorithm approaches that pertain to several other evolutionary inspired heuristic approaches; Genetic Programming (GP), Evolutionary Programming (EP) and Evolutionary Strategies (ESs). GAs are search and optimization algorithms inspired by biological evolutionary processes. They have been highly successful as techniques for getting computers to automatically solve problems relying on evolutionary heuristics. Since their inception more than thirty years ago GAs have been used to solve complex computational problems but along with this engineering aspect there has been a growing interest in their theoretical bases and various implementations.

This objective of this book is to present the latest state-of-the-art theories, methodologies and applications of GAs. It deals with the theoretical and methodological aspects, as well as various applications in a variety of disciplines. GAs are applied to real world problems from science, technology, biology, chemistry, social sciences, business and commerce. This book comprises of several chapters including theories and applications giving the fundamentals and many important research challenges in this field of study.

This book has been designed to be beneficial to most practicing scientists and engineers interested in this area.

Herewith we invite all qualified authors interested in GAs to join our team to add a landmark to this research area.

GAs constitutes one of the most successful and widely used Evolutionary Algorithms. Other commonly used and similarly successful EA techniques are Genetic Programming (GP), Evolutionary Programming (EP) and Evolution Strategies (ES). Evolutionary Algorithms

Your participation is highly appreciated

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