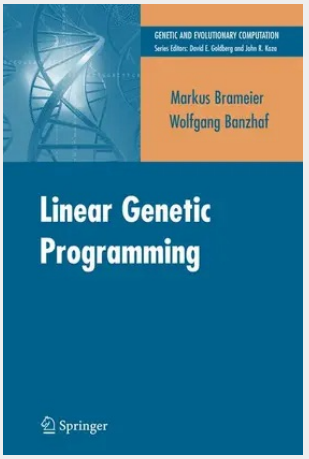
Brameier / Banzhaf

Linear Genetic Programming



Linear Genetic Programming presents a variant of genetic programming (GP) that evolves imperative computer programs as linear sequences of instructions, in contrast to the more traditional functional expressions or syntax trees. Primary characteristics of linear program structure are exploited to achieve acceleration of both execution time and evolutionary progress. Online analysis and optimization of program code lead to more efficient techniques and contribute to a better understanding of the method and its parameters. In particular, the reduction of structural variation step size and non-effective variations play a key role in finding higher quality and less complex solutions. Typical GP phenomena, such as non-effective code, neutral variations, and code growth are investigated from the perspective of linear GP.

This book serves as a reference for researchers; it also contains sufficient introductory material for students and those who are new to the field.

This book presents a variant of Genetic Programming that evolves imperative computer programs as linear sequences of instructions, in contrast to the more traditional functional expressions or syntax trees. It is one of the few books that deals solely with Linear GP and contains many concrete, experimental results. The book serves as a reference for researchers, but also contains sufficient introduction for students and those who are new to the field.

160,49 €
149,99 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780387310299
Medium: Buch
ISBN: 978-0-387-31029-9
Verlag: Springer Us
Erscheinungstermin: 11.12.2006
Sprache(n): Englisch
Auflage: 2007. Auflage 2006
Serie: Genetic and Evolutionary Computation
Produktform: Gebunden
Gewicht: 1420 g
Seiten: 315
Format (B x H): 167 x 243 mm

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)