



## Hypervolume-Based Search for Multiobjective Optimization: Theory and Methods (Paperback)

By Johannes M Bader

Createspace, United States, 2010. Paperback. Book Condition: New. 252 x 176 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*. Most problems encountered in practice involve the optimization of multiple criteria. Usually, some of them are conflicting such that no single solution is simultaneously optimal with respect to all criteria, but instead many incomparable compromise solutions exist. In recent years, evidence has accumulated showing that Evolutionary Algorithms (EAs) are effective means of finding good approximate solutions to such problems. One of the crucial parts of EAs consists of repeatedly selecting suitable solutions. In this process, the two key issues are as follows: first, a solution that is better than another solution in all objectives should be preferred over the latter. Second, the diversity of solutions should be supported, whereby often user preference dictates what constitutes a good diversity. The hypervolume offers one possibility to achieve the two aspects; for this reason, it has been gaining increasing importance in recent years. The present thesis investigates three central topics of the hypervolume that are still unsolved: 1: Although more and more EAs use the hypervolume as selection criterion, the resulting distribution of points favored by the hypervolume has scarcely been...



READ ONLINE
[ 3.38 MB ]

## Reviews

A whole new e book with a brand new standpoint. I have read through and i also am certain that i am going to planning to read again yet again later on. I found out this book from my i and dad advised this pdf to learn.

-- Audrey Lowe I

It is fantastic and great. It is really simplified but unexpected situations from the 50 % in the ebook. I discovered this ebook from my dad and i suggested this book to learn.

-- Dr. Luna Skiles