BOOK REVIEW
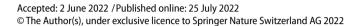
Review of "Handbook of Heuristics"

Ilias S. Kotsireas[1]

The Handbook of Heuristics [1] is a monumental work edited by 3 of the foremost worldwide experts, namely Rafael Martí, Panos M. Pardalos and Mauricio G. C. Resende. This comprehensive reference work is organized in two volumes, split in 5 parts (Search Strategies, Local Search, Metaheuristics, Analysis and Implementation, Applications) and further subdivided in 47 chapters in total, spread across nearly 1400 pages. While the scope and coverage of the Handbook of Heuristics are certainly impressive, the detailed presentation of the topics and the long up-to-date lists of references are two other noticeable features of the work.

The self-contained nature of the chapters, makes the Handbook of Heuristics an ideal resource for those students, faculty, engineers, researchers and practitioners that wish to pursue a self-study of a particular heuristic, with the aim to use it successfully in their own research investigations and academic or industrial projects. The fifth part, on Applications, consolidates and complements nicely the previous four parts, by exhibiting specific examples of real-life applications.

An important take-home message from the Handbook of Heuristics is that no single heuristic methodology is a panacea. Instead, one has to carefully examine the available heuristics and decide which ones have a better chance to work in the particular problem at hand.

The Handbook of Heuristics provides a comprehensive and holistic view of the landscape of heuristics and metaheuristics available today. It is an extremely well-written collection of chapters and is bound to become a standard reference for anyone who wants to acquire a thorough understanding of heuristics and metaheuristics.

References

1. Rafael M, Pardalos PM, Resende MG (eds) (2018) Handbook of Heuristics. Springer

✉ Ilias S. Kotsireas
  ikotsire@wlu.ca

1 CARGO Lab, Wilfrid Laurier University, Waterloo, ON, Canada