Preface to the Second Edition

No pleasure lasts long
unless there is variety in it.
Publilius Syrus, Moral Sayings

We’ve been very fortunate to receive fantastic feedback from our readers during the last four years, since the first edition of How to Solve It: Modern Heuristics was published in 1999. It’s heartening to know that so many people appreciated the book and, even more importantly, were using the book to help them solve their problems. One professor, who published a review of the book, said that his students had given the best course reviews he’d seen in 15 years when using our text. There can be hardly any better praise, except to add that one of the book reviews published in a SIAM journal received the best review award as well. We greatly appreciate your kind words and personal comments that you sent, including the few cases where you found some typographical or other errors. Thank you all for this wonderful support.

One of the telltale signs that a book is having a significant impact is when it gets translated into another language. And we owe special thanks to Hongqing Cao, who prepared the Chinese edition of this book (and found a few remaining errors as well). An even more telling sign that a book is doing well is when it’s translated into two languages, and we’ve learned recently that a Polish translation of the book is forthcoming. Still another good sign is when the publisher wants to publish a new edition of the book. Since the first printing, over 80 pages of the original edition have been replaced gradually by edited and corrected pages, so we hope this second edition will be error free!

You’ll find that this second edition contains two new chapters in response to our readers’ requests: one on coevolutionary systems and the other on multicriteria decision-making. Of course, in the spirit of our first edition, we’ve added some new puzzles for you as well. We hope you find these puzzles to be at the same challenging level as those from the first edition. You’ll find a few other chapters have some changes, and a new section in chapter 11.

We’d like to take this opportunity to thank everyone who took the time to share their thoughts on the text with us — they were most helpful. These thanks go to hundreds of readers who sent us e-mails commenting on different sections of the text, examples, references, and puzzles. We also express our gratitude to Rodney Johnson, Michaelel Melich, and Dave Schaffer for useful comments on parts of new chapters, Min Sun for her help in building some
new figures included in the text, Antoni Mazurkiewicz for providing us with “the bicycle puzzle,” and Brian Mayoh, who pointed us to the “pirates puzzle,” both of which are placed in chapter XIV. Very special thanks are due to Carlos A. Coello Coello, who provided us with invaluable assistance and experimental results of a multiobjective optimization method on selected test cases. These are included in section 15.2.2. We also thank Ingeborg Mayer from Springer-Verlag for her help throughout the project.

As with the first edition, our purpose will be fulfilled if you find this book challenging, entertaining, and provocative.

Charlotte, NC
La Jolla, CA
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