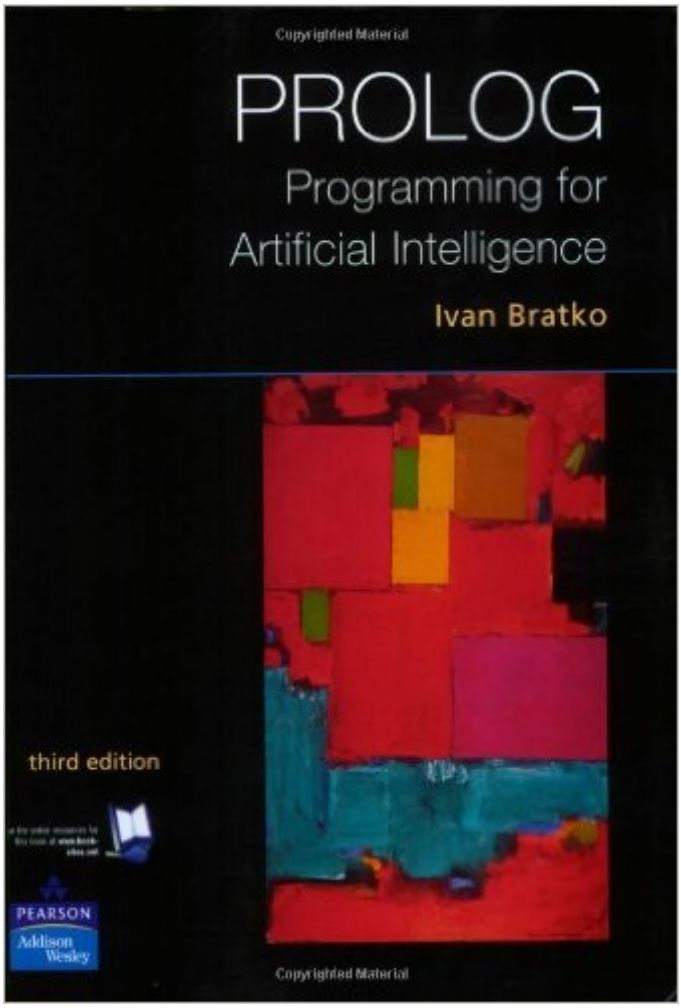
Prolog Programming For Artificial Intelligence



Synopsis

The third edition of this best-selling guide to Prolog and Artificial Intelligence has been updated to include key developments in the field while retaining its lucid approach to these topics. Divided into two parts, the first part of the book introduces the programming language Prolog, while the second part teaches Artificial Intelligence using Prolog as a tool for the implementation of AI techniques. Prolog has its roots in logic, however the main aim of this book is to teach Prolog as a practical programming tool. This text therefore concentrates on the art of using the basic mechanisms of Prolog to solve interesting problems. The third edition has been fully revised and extended to provide an even greater range of applications, which further enhance its value as a self-contained guide to Prolog, AI or AI Programming for students and professional programmers alike.

Book Information

Series: International Computer Science Series

Paperback: 678 pages

Publisher: Addison Wesley; 3rd edition (September 8, 2000)

Language: English

ISBN-10: 0201403757

ISBN-13: 978-0201403756

Product Dimensions: 7 x 1.5 x 9.2 inches

Shipping Weight: 2.6 pounds

Average Customer Review: 4.6 out of 5 starsÂ Â See all reviewsÂ (18 customer reviews)

Best Sellers Rank: #1,139,552 in Books (See Top 100 in Books) #6 inÂ Books > Computers & Technology > Programming > Languages & Tools > Prolog #389 inÂ Books > Textbooks > Computer Science > Artificial Intelligence #746 inÂ Books > Computers & Technology > Computer Science > AI & Machine Learning > Intelligence & Semantics

Customer Reviews

Prolog is not an easy subject, especially for someone not well familiar with mathematical logic. Thus it is very important how the foundation would be laid down. Other books I had read on Prolog tended to two extremes. They were either too condensed for such a complicated language, or too broad and mathematically intensive. The author of this book had managed to find the optimal style of presenting both the essence and the practical aspects of the language. The book makes learning Prolog easy and fun. It covers many practical applications of the language and manages to convey the basic concepts of Prolog without overwhelming the beginner with too abstract passages. This

book gives you the taste of declarative programming, which could be a very challenging shift in the way of thinking, especially for programmers used to procedural techniques. The book of Ivan Bratko will soften the learning curve and make the experience much pleasant.The book is well structured, which makes it also a good programming reference. The material is very well illustrated and supported by a plenty of easy to understand examples. One can open it at any page and easily understand the material without tracing back and forth multiple chapters. This is a great book. Buy it if you don’t want to stop learning Prolog before you understood it.

Although this text is always mentioned in the same breath as other introductory textbooks on prolog, I don’t think I’ve ever seen it described as "the best."The book which usually takes the palm in such comparisons is "Art of Prolog." While "Art of Prolog" is an outstanding book, I think that now, in 2006, it has been eclipsed by the 3rd edition Bratko’s book. Why?Simply this: Bratko’s textbook is (as far as I’m aware) the _only_ textbook on prolog which treats the language as a living, developing language! Other textbooks are great for their time, but they are unfortunately stuck in their time. Its as if nothing has happend to the prolog language since February 16, 1987. But this isn’t true at all!The biggest case in point: constraint logic programming! Bratko’s text is the only introductory prolog textbook to even acknowledge the existance of CLP. And Bratko gives very lucid descriptions of it, along with very helpful examples and challenging exercises.Another case in point: inductive logic programming! An entire new branch of machine learning theory has risen, based on logic programming, and NONE of the other introductory prolog textbooks cover it? Come on guys!I would love to see a 4th edition of this book, because since this one has been published, logic programming has moved even further ahead. Constraint handling rules (CHR), logical functional languages (like Curry), using prolog for the semantic web, etc etc etc. It might be the best kept secret in computer science, but logic programming is really still one of the most exciting areas of programming, and Bratko’s book does the best job of staying abreast of, and conveying the excitment of, this living and dynamic field.

... a horrible Prolog tutorial.This is not a good first book on Prolog. If you are new to Prolog and Logic Programming, you should read ’Art of Prolog’ first.Prolog is quite different from other languages, and you’ll need some time to get it. This book doesn’t give you that time: after briefly introducing the basic concepts, Bratko dives at breakneck speed into recursion and list processing.Don’t get me wrong, this is a magnificent book on how to do AI with Prolog, but it shouldn’t be your first Prolog book. It’s an excellent second book.

This book is clear and well written. Its an excellent first book on Prolog programming. It also takes you far into the subject, up to a point where you should be able to write useable Prolog programs.Much more clearly written than "Programming in Prolog" Prolog by Clocksin and Mellish, and it covers the same ground.Prolog is not for everyone. You have to be quite intelligent to be able to use it effectively. And its not a general-purpose language. But Prolog is excellent for some applications, such as writing Expert Systems, Natural Language Parsers, and other A.I. applications.This book is best used in combination with a prolog compiler/interpreter, so you can try out Prolog as you read about it. There are some free ones available on the Web.

Having just read a book on automated reasoning which covered topics in logic, such as unification and resolution, I was very pleased with the prolog programming language, in that it takes concepts from logic, and uses them in ways that can be applied to a number of interesting areas of AI, such as NLP, planning, and expert systems. I thought Bratko succeeded in making this connection with logic, without burdening the reader with notation and concepts that are really not needed for writing or understanding prolog programs.The book also worked for me on the level of providing a good introduction to the syntax and sematics of the language. The first 200 pages succeed to this end.Finally, the last 13 chapters can be summarized as representing an introduction to AI from a prolog perspective. On the positive side, he shows how to apply prolog to all of the modern, main streams of AI study. However, on the negative, the slant towards prolog in these chapters tends to oversimplify these disciplines.My impression of the language is that it seems good as a prototying language, since it is declarative in nature, but from my experimentation (using SWI Prolog) I think I could write better implementations using c or java.In closing, Bratko’s book represents a very good place to start learning prolog and the world of AI.

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