Introduction to Artificial Intelligence (Undergraduate Topics in Computer Science)

Von Wolfgang Ertel
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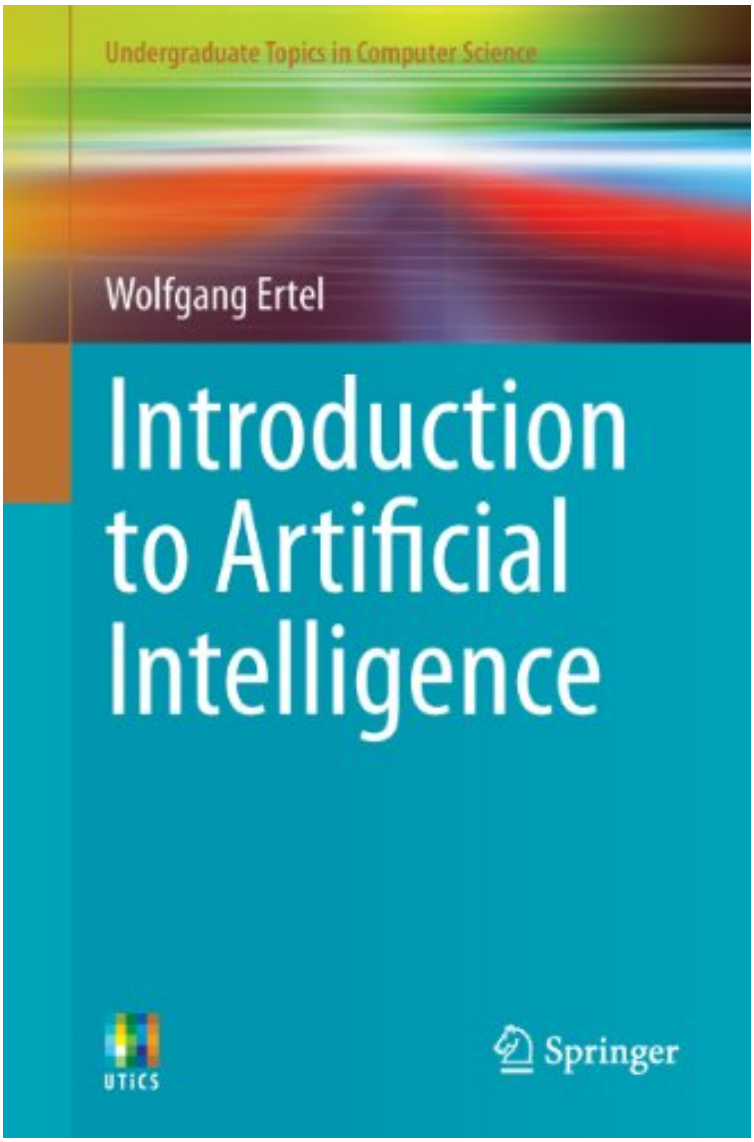

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Von Wolfgang Ertel : Introduction to Artificial Intelligence (Undergraduate Topics in Computer Science) before purchasing it in order to gage whether or not it would be worth my time, and all praised Introduction to Artificial Intelligence (Undergraduate Topics in Computer Science):

KundenrezensionenHilfreichste Kundenrezensionen0 von 0 Kunden fanden die folgende Rezension hilfreich. Valuable and Pedagogical Introductory TextVon Dr. Bojan TunguzArtificial Intelligence is by now a relatively old field, having

originated in the early days of the digital computer revolution. However, it has had a very rocky and turbulent history, going through several cycles of overblown expectations followed by almost equally dramatic swings towards disillusionment and skepticism. In recent years, though, it has matured into a very solid and practical discipline that exercises an ever growing importance across a wide breadth of technologies and professions. We increasingly take speech recognition, handwriting recognition, and natural language search for granted. Basic familiarity with what Artificial Intelligence is, and what tools and techniques fall under its domain, are becoming ever important aspect of a variety of professions and occupations.There is no shortage of books and resources on Artificial Intelligence. However, most of them fall squarely into two main camps: discursive overviews for the general audience, and highly advanced textbooks requiring deep familiarity with many advanced technical concepts. Ertels Introduction to Artificial Intelligence, even though its pretty technical in its own right, is still fairly accessible introduction to this field for anyone with solid grasp of basic college-level math and computer science concepts.The book is organized somewhat chronologically along the lines of topics that have historically formed the main organizing principles for the study of Artificial Intelligence - first and second order logic, propositional calculus, PROLOG, machine learning, neural networks. Some of the earlier chapters material is a bit dated, and in some cases unfamiliar to students and practitioners in North America. For instance, it seems that PROLOG never quite got a hold on this side of Atlantic. There are a few more or less amusing examples of how quickly technology ages, such as references to Google Video links, which havent been around for a few years now. I would have also liked a substantially more material on machine learning and neural nets, maybe at the expense of the earlier chapters. These topics have a lot of practical applications today, and seem to be the guiding paradigms for Artificial Intelligence as a whole for a foreseeable future. Nonetheless, the book overall is very readable and relevant.One of the most valuable aspects of this book are the worked out examples and numerous (solved) exercises. Working through problems is, by far, the best way to learn any new material, and this book provides the reader with numerous and wide-ranging opportunity to do exactly that.Overall, this is a very well written and pedagogical book that fills an important niche in the Artificial Intelligence educational literature. Highly recommended.**** Electronic version of the book provided by the publisher for review purposes. ****

KurzbeschreibungThis concise and accessible textbook supports a foundation or module course on A.I., covering a broad selection of the subdisciplines within this field. The book presents concrete algorithms and applications in the areas of agents, logic, search, reasoning under uncertainty, machine learning, neural networks and reinforcement learning. Topics and features: presents an application-focused and hands-on approach to learning the subject; provides study exercises of varying degrees of difficulty at the end of each chapter, with solutions given at the end of the book; supports the text with highlighted examples, definitions, and theorems; includes chapters on predicate logic, PROLOG, heuristic search, probabilistic reasoning, machine learning and data mining, neural networks and reinforcement learning; contains an extensive bibliography for deeper reading on further topics; supplies additional teaching resources, including lecture slides and training data for learning algorithms, at an associated website.PressestimmenThe book overall is very readable and relevant. One of the most valuable aspects of this book are the worked out examples and numerous (solved) exercises. Overall, this is a very well written and pedagogical book that fills an important niche in the Artificial Intelligence educational literature. Highly recommended. (Bojan Tunguz, tunguzreview.com, July, 2015)This accessible and concise introduction to the field of artificial intelligence (AI) is intended primarily for self-study or as a foundation of a short course on the subject. The book consists of ten topic chapters, each one of which offers an extended list of exercises. Chapter 11 contains solutions to all exercises. Additional teaching resources, including lecture slides, are available on the book website. (Neli Zlatareva, Zentralblatt MATH, Vol. 1238, 2012)The book is aimed primarily at undergraduates who have not yet taken linear algebra or multidimensional calculus. it contains many exercises with solutions at the back; thus, it supports self-learning. The many excellent figures, some in color, help make the material easily understandable. A companion Web site contains supplementary materials, such as program code for the book, most of which is in or commented on in German. Summing Up: Recommended. Upper-division undergraduates and above. (S. L. Tanimoto, Choice, Vol. 49 (2), October, 2011)KurzbeschreibungThis concise and accessible textbook supports a foundation or module course on A.I., covering a broad selection of the subdisciplines within this field. The book presents concrete algorithms and applications in the areas of agents, logic, search, reasoning under uncertainty, machine learning, neural networks and reinforcement learning. Topics and features: presents an application-focused and hands-on approach to learning the subject; provides study exercises of varying degrees of difficulty at the end of each chapter, with solutions given at the end of the book; supports the text with highlighted examples, definitions, and theorems; includes chapters on predicate logic, PROLOG, heuristic search, probabilistic reasoning, machine learning and data mining, neural networks and reinforcement learning; contains an extensive bibliography for deeper reading on further topics; supplies additional

teaching resources, including lecture slides and training data for learning algorithms, at an associated website.