



# An Introduction to Knowledge Engineering

By Simon Kendal, Malcolm Creen

[Download now](#)

[Read Online](#) 

## An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen

An Introduction to Knowledge Engineering presents a simple but detailed exploration of current and established work in the field of knowledge-based systems and related technologies. Its treatment of the increasing variety of such systems is designed to provide the reader with a substantial grounding in such technologies as expert systems, neural networks, genetic algorithms, case-based reasoning systems, data mining, intelligent agents and the associated techniques and methodologies. The material is reinforced by the inclusion of numerous activities that provide opportunities for the reader to engage in their own research and reflection as they progress through the book. In addition, self-assessment questions allow the student to check their own understanding of the concepts covered. The book will be suitable for both undergraduate and postgraduate students in computing science and related disciplines such as knowledge engineering, artificial intelligence, intelligent systems, cognitive neuroscience, robotics and cybernetics.

vii	Contents
vii	Foreword
vii	1 An Introduction to Knowledge Engineering
1	Section 1: Data, Information and Knowledge
2	Section 2: Skills of a Knowledge Engineer
10	Section 3: An Introduction to Knowledge-Based Systems
18	2 Types of Knowledge-Based Systems
26	Section 1: Expert Systems
27	Section 2: Neural Networks
36	Section 3: Case-Based Reasoning
55	Section 4: Genetic Algorithms
66	Section 5: Intelligent Agents
74	Section 6: Data Mining
83	3 Knowledge Acquisition
89	4 Knowledge Representation and Reasoning
108	Section 1: Using Knowledge
109	Section 2: Logic, Rules and Representation
116	Section 3: Developing Rule-Based Systems
126	Section 4: Semantic Networks

 [Download An Introduction to Knowledge Engineering ...pdf](#)

 [Read Online An Introduction to Knowledge Engineering ...pdf](#)

# An Introduction to Knowledge Engineering

By *Simon Kendal, Malcolm Creen*

## An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen

An Introduction to Knowledge Engineering presents a simple but detailed exp- ration of current and established work in the ?eld of knowledge-based systems and related technologies. Its treatment of the increasing variety of such systems is designed to provide the reader with a substantial grounding in such technologies as expert systems, neural networks, genetic algorithms, case-based reasoning systems, data mining, intelligent agents and the associated techniques and meth- ologies. The material is reinforced by the inclusion of numerous activities that provide opportunities for the reader to engage in their own research and re?ection as they progress through the book. In addition, self-assessment questions allow the student to check their own understanding of the concepts covered. The book will be suitable for both undergraduate and postgraduate students in computing science and related disciplines such as knowledge engineering, arti?cial intelligence, intelligent systems, cognitive neuroscience, robotics and cybernetics. vii Contents Foreword vii

1 An Introduction to Knowledge Engineering.....	1
Section 1: Data, Information and Knowledge .....	
Engineer .....	10
Section 3: An Introduction to Knowledge-Based Systems.....	18
2 Types of Knowledge-Based Systems .....	
..... 26 Section 1: Expert Systems.....	
..... 27 Section 2: Neural Networks.....	36
Section 3: Case-Based Reasoning.....	55
Genetic Algorithms.....	66
Agents.....	74
Section 6: Data Mining .....	
..... 83 Section 3: Knowledge Acquisition.....	
..... 89 Section 4: Knowledge Representation and Reasoning .....	
..... 108 Section 1: Using Knowledge.....	
..... 109 Section 2: Logic, Rules and Representation .....	
..... 116 Section 3: Developing Rule-Based Systems .....	126
Section 4: Semantic Networks.....	

## An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen Bibliography

- Rank: #3026887 in Books
- Brand: Brand: Springer
- Published on: 2006-10-19
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .67" w x 6.00" l, .93 pounds
- Binding: Paperback
- 290 pages



[Download An Introduction to Knowledge Engineering ...pdf](#)



[Read Online An Introduction to Knowledge Engineering ...pdf](#)

**Download and Read Free Online An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen**

---

## **Editorial Review**

### Review

From the reviews:

"The book is written in a modern style, which should encourage undergraduate students to read it. ... Overall, the book covers all classical topics of knowledge-based systems: knowledge acquisition, representation, expert system shells, and life cycles. It could make a good textbook for undergraduate courses ... and the students research the uniform resource locator (URL) links provided." (Aladdin Ayesh, ACM Computing Reviews, Vol. 49 (4), April, 2008)

### From the Back Cover

Knowledge Engineering, as a discipline and a profession, has emerged from the practical application of decades of research into artificial intelligence and intelligent systems. In particular, knowledge engineering refers to the development of systems that use knowledge, rather than data, to solve many novel computing problems. This is achieved by the application of computing techniques, closely associated with human cognitive processes, for transforming data into knowledge.

An Introduction to Knowledge Engineering presents a simple but detailed exploration of current and established work in the field. Its simple yet comprehensive treatment of knowledge based systems will provide the reader with a substantial grounding in such technologies as:

- expert systems
- neural networks
- genetic algorithms
- case based reasoning systems
- data mining
- intelligent agents.

The text includes activities and self assessments that provide opportunities for the reader to reflect on and reinforce their understanding of the concepts as they progress.

The book will be suitable for both undergraduate and postgraduate students in computing science and related disciplines such as Knowledge Engineering, Artificial Intelligence, Intelligent systems, Cognitive Neuroscience, Robotics and Cybernetics.

In addition, it is expected that anyone interested or involved in sophisticated information system developments will find the book a valuable source of ideas and guidance.

## **Users Review**

### **From reader reviews:**

#### **William Nix:**

As people who live in the modest era should be up-date about what going on or details even knowledge to make these people keep up with the era that is always change and make progress. Some of you maybe can update themselves by looking at books. It is a good choice for you but the problems coming to you is you don't know which you should start with. This An Introduction to Knowledge Engineering is our recommendation to help you keep up with the world. Why, because this book serves what you want and wish in this era.

#### **Georgetta Watson:**

The book untitled An Introduction to Knowledge Engineering is the e-book that recommended to you to study. You can see the quality of the reserve content that will be shown to you. The language that publisher use to explained their ideas are easily to understand. The copy writer was did a lot of research when write the book, therefore the information that they share for you is absolutely accurate. You also could possibly get the e-book of An Introduction to Knowledge Engineering from the publisher to make you a lot more enjoy free time.

#### **John Folsom:**

Are you kind of hectic person, only have 10 or maybe 15 minute in your day time to upgrading your mind expertise or thinking skill actually analytical thinking? Then you are receiving problem with the book as compared to can satisfy your limited time to read it because this time you only find book that need more time to be learn. An Introduction to Knowledge Engineering can be your answer since it can be read by you who have those short time problems.

#### **Marian Buell:**

Reading a publication make you to get more knowledge as a result. You can take knowledge and information coming from a book. Book is prepared or printed or illustrated from each source this filled update of news. Within this modern era like at this point, many ways to get information are available for you. From media social similar to newspaper, magazines, science publication, encyclopedia, reference book, story and comic. You can add your understanding by that book. Are you ready to spend your spare time to open your book? Or just searching for the An Introduction to Knowledge Engineering when you required it?

## **Download and Read Online An Introduction to Knowledge**

**Engineering By Simon Kendal, Malcolm Creen #K3JXYO6LHGU**

# **Read An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen for online ebook**

An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen books to read online.

## **Online An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen ebook PDF download**

**An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen Doc**

**An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen Mobipocket**

**An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen EPub**

**K3JXYO6LHGU: An Introduction to Knowledge Engineering By Simon Kendal, Malcolm Creen**