



## Solid Shape (Artificial Intelligence)

By Jan J. Koenderink

Download now

Read Online →

**Solid Shape (Artificial Intelligence)** By Jan J. Koenderink

Solid Shape gives engineers and applied scientists access to the extensive mathematical literature on three dimensional shapes. Drawing on the author's deep and personal understanding of three-dimensional space, it adopts an intuitive visual approach designed to develop heuristic tools of real use in applied contexts. Increasing activity in such areas as computer aided design and robotics calls for sophisticated methods to characterize solid objects. A wealth of mathematical research exists that can greatly facilitate this work yet engineers have continued to "reinvent the wheel" as they grapple with problems in three dimensional geometry. Solid Shape bridges the gap that now exists between technical and modern geometry and shape theory or computer vision, offering engineers a new way to develop the intuitive feel for behavior of a system under varying situations without learning the mathematicians' formal proofs. Reliance on descriptive geometry rather than analysis and on representations most easily implemented on microcomputers reinforces this emphasis on transforming the theoretical to the practical. Chapters cover shape and space, Euclidean space, curved submanifolds, curves, local patches, global patches, applications in ecological optics, morphogenesis, shape in flux, and flux models. A final chapter on literature research and an appendix on how to draw and use diagrams invite readers to follow their own pursuits in threedimensional shape. Jan J. Koenderinck is Professor in the Department of Physics and Astronomy at Utrecht University. Solid Shape is included in the Artificial Intelligence series, edited by Patrick Winston, Michael Brady, and Daniel Bobrow

↓ [Download Solid Shape \(Artificial Intelligence\) ...pdf](#)

📄 [Read Online Solid Shape \(Artificial Intelligence\) ...pdf](#)

# Solid Shape (Artificial Intelligence)

*By Jan J. Koenderink*

## Solid Shape (Artificial Intelligence) By Jan J. Koenderink

Solid Shape gives engineers and applied scientists access to the extensive mathematical literature on three dimensional shapes. Drawing on the author's deep and personal understanding of three-dimensional space, it adopts an intuitive visual approach designed to develop heuristic tools of real use in applied contexts. Increasing activity in such areas as computer aided design and robotics calls for sophisticated methods to characterize solid objects. A wealth of mathematical research exists that can greatly facilitate this work yet engineers have continued to "reinvent the wheel" as they grapple with problems in three dimensional geometry. Solid Shape bridges the gap that now exists between technical and modern geometry and shape theory or computer vision, offering engineers a new way to develop the intuitive feel for behavior of a system under varying situations without learning the mathematicians' formal proofs. Reliance on descriptive geometry rather than analysis and on representations most easily implemented on microcomputers reinforces this emphasis on transforming the theoretical to the practical. Chapters cover shape and space, Euclidean space, curved submanifolds, curves, local patches, global patches, applications in ecological optics, morphogenesis, shape in flux, and flux models. A final chapter on literature research and an appendix on how to draw and use diagrams invite readers to follow their own pursuits in threedimensional shape. Jan J. Koenderink is Professor in the Department of Physics and Astronomy at Utrecht University. Solid Shape is included in the Artificial Intelligence series, edited by Patrick Winston, Michael Brady, and Daniel Bobrow

## Solid Shape (Artificial Intelligence) By Jan J. Koenderink Bibliography

- Sales Rank: #1225466 in Books
- Published on: 1990-03-21
- Original language: English
- Number of items: 1
- Dimensions: 9.20" h x 1.80" w x 6.30" l, 2.70 pounds
- Binding: Hardcover
- 715 pages

 [Download Solid Shape \(Artificial Intelligence\) ...pdf](#)

 [Read Online Solid Shape \(Artificial Intelligence\) ...pdf](#)

## **Editorial Review**

About the Author

Jan J. Koenderink is Professor in the Department of Physics and Astronomy at Utrecht University.

## **Users Review**

**From reader reviews:**

**Janice Delarosa:**

The reserve untitled Solid Shape (Artificial Intelligence) is the book that recommended to you to read. You can see the quality of the book content that will be shown to you actually. The language that writer use to explained their way of doing something is easily to understand. The copy writer was did a lot of study when write the book, therefore the information that they share to your account is absolutely accurate. You also might get the e-book of Solid Shape (Artificial Intelligence) from the publisher to make you much more enjoy free time.

**Nancy Deanda:**

Do you have something that you want such as book? The reserve lovers usually prefer to decide on book like comic, limited story and the biggest you are novel. Now, why not hoping Solid Shape (Artificial Intelligence) that give your pleasure preference will be satisfied through reading this book. Reading behavior all over the world can be said as the means for people to know world better then how they react in the direction of the world. It can't be stated constantly that reading routine only for the geeky man but for all of you who wants to always be success person. So , for every you who want to start reading through as your good habit, it is possible to pick Solid Shape (Artificial Intelligence) become your starter.

**Edward Cottrell:**

Does one one of the book lovers? If yes, do you ever feeling doubt if you are in the book store? Aim to pick one book that you never know the inside because don't ascertain book by its cover may doesn't work at this point is difficult job because you are afraid that the inside maybe not seeing that fantastic as in the outside appear likes. Maybe you answer could be Solid Shape (Artificial Intelligence) why because the great cover that make you consider with regards to the content will not disappoint an individual. The inside or content will be fantastic as the outside or cover. Your reading sixth sense will directly make suggestions to pick up this book.

**James Ritchey:**

A lot of guide has printed but it differs from the others. You can get it by web on social media. You can

choose the very best book for you, science, comedian, novel, or whatever by means of searching from it. It is referred to as of book Solid Shape (Artificial Intelligence). You can include your knowledge by it. Without leaving the printed book, it might add your knowledge and make a person happier to read. It is most important that, you must aware about publication. It can bring you from one destination for a other place.

**Download and Read Online Solid Shape (Artificial Intelligence) By  
Jan J. Koenderink #NCUA52GXH6R**

## **Read Solid Shape (Artificial Intelligence) By Jan J. Koenderink for online ebook**

Solid Shape (Artificial Intelligence) By Jan J. Koenderink 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 Solid Shape (Artificial Intelligence) By Jan J. Koenderink books to read online.

### **Online Solid Shape (Artificial Intelligence) By Jan J. Koenderink ebook PDF download**

**Solid Shape (Artificial Intelligence) By Jan J. Koenderink Doc**

**Solid Shape (Artificial Intelligence) By Jan J. Koenderink Mobipocket**

**Solid Shape (Artificial Intelligence) By Jan J. Koenderink EPub**

**NCUA52GXH6R: Solid Shape (Artificial Intelligence) By Jan J. Koenderink**