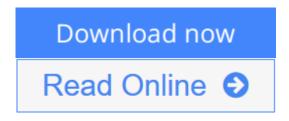


Visual Reconstruction (Artificial Intelligence)

By Andrew Blake, Andrew Zisserman



Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman

Visual Reconstruction presents a unified and highly original approach to the treatment of continuity in vision. It introduces, analyzes, and illustrates two new concepts. The first - the weak continuity constraint - is a concise, computational formalization of piecewise continuity. It is a mechanism for expressing the expectation that visual quantities such as intensity, surface color, and surface depth vary continuously almost everywhere, but with occasional abrupt changes. The second concept - the graduated nonconvexity algorithm - arises naturally from the first. It is an efficient, deterministic (nonrandom) algorithm for fitting piecewise continuous functions to visual data.

The book first illustrates the breadth of application of reconstruction processes in vision with results that the authors' theory and program yield for a variety of problems. The mathematics of weak continuity and the graduated nonconvexity (GNC) algorithm are then developed carefully and progressively.

Contents: Modeling Piecewise Continuity. Applications of Piecewise Continuous Reconstruction. Introducing Weak Continuity Constraints. Properties of the Weak String and Membrane. Properties of Weak Rod and Plate. The Discrete Problem. The Graduated Nonconvexity (GNC) Algorithm. Appendixes: Energy Calculations for the String and Membrane. Noise Performance of the Weak Elastic String. Energy Calculations for the Rod and Plate. Establishing Convexity. Analysis of the GNC Algorithm.

Both authors are in the Department of Computer Science at the University of Edinburgh. Andrew Blake is Lecturer and a Royal Society IBM Research Fellow. Andrew Zisserman is a Science and Engineering Research Council (SERC) Research Fellow. *Visual Reconstruction* is included in the Artificial Intelligence series, edited by Michael Brady and Patrick Winston.

<u>Download Visual Reconstruction (Artificial Intelligence) ...pdf</u>

Read Online Visual Reconstruction (Artificial Intelligence) ...pdf

Visual Reconstruction (Artificial Intelligence)

By Andrew Blake, Andrew Zisserman

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman

Visual Reconstruction presents a unified and highly original approach to the treatment of continuity in vision. It introduces, analyzes, and illustrates two new concepts. The first - the weak continuity constraint - is a concise, computational formalization of piecewise continuity. It is a mechanism for expressing the expectation that visual quantities such as intensity, surface color, and surface depth vary continuously almost everywhere, but with occasional abrupt changes. The second concept - the graduated nonconvexity algorithm - arises naturally from the first. It is an efficient, deterministic (nonrandom) algorithm for fitting piecewise continuous functions to visual data.

The book first illustrates the breadth of application of reconstruction processes in vision with results that the authors' theory and program yield for a variety of problems. The mathematics of weak continuity and the graduated nonconvexity (GNC) algorithm are then developed carefully and progressively.

Contents: Modeling Piecewise Continuity. Applications of Piecewise Continuous Reconstruction. Introducing Weak Continuity Constraints. Properties of the Weak String and Membrane. Properties of Weak Rod and Plate. The Discrete Problem. The Graduated Nonconvexity (GNC) Algorithm. Appendixes: Energy Calculations for the String and Membrane. Noise Performance of the Weak Elastic String. Energy Calculations for the Rod and Plate. Establishing Convexity. Analysis of the GNC Algorithm.

Both authors are in the Department of Computer Science at the University of Edinburgh. Andrew Blake is Lecturer and a Royal Society IBM Research Fellow. Andrew Zisserman is a Science and Engineering Research Council (SERC) Research Fellow. *Visual Reconstruction* is included in the Artificial Intelligence series, edited by Michael Brady and Patrick Winston.

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman Bibliography

- Sales Rank: #5203074 in Books
- Brand: Brand: MIT Press
- Published on: 1987-09-21
- Ingredients: Example Ingredients
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x 1.00" w x 6.00" l,
- Binding: Hardcover
- 240 pages

Download Visual Reconstruction (Artificial Intelligence) ...pdf

Read Online Visual Reconstruction (Artificial Intelligence) ...pdf

Download and Read Free Online Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman

Editorial Review

About the Author

Andrew Blake is Lecturer and a Royal Society IBM Research Fellow in the Department of Computer Science at the University of Edinburgh.

Andrew Zisserman is a Science and Engineering Research Council (SERC) Research Fellow in the Department of Computer Science at the University of Edinburgh.

Users Review

From reader reviews:

Arthur West:

Book is to be different for each grade. Book for children until eventually adult are different content. We all know that that book is very important usually. The book Visual Reconstruction (Artificial Intelligence) seemed to be making you to know about other understanding and of course you can take more information. It is rather advantages for you. The publication Visual Reconstruction (Artificial Intelligence) is not only giving you a lot more new information but also to get your friend when you truly feel bored. You can spend your personal spend time to read your e-book. Try to make relationship with all the book Visual Reconstruction (Artificial Intelligence). You never truly feel lose out for everything if you read some books.

Johnny Hoffman:

In this 21st century, people become competitive in every single way. By being competitive now, people have do something to make these people survives, being in the middle of typically the crowded place and notice by means of surrounding. One thing that oftentimes many people have underestimated it for a while is reading. Sure, by reading a reserve your ability to survive raise then having chance to stand up than other is high. For yourself who want to start reading a new book, we give you that Visual Reconstruction (Artificial Intelligence) book as beginning and daily reading e-book. Why, because this book is greater than just a book.

Terry Hollis:

A lot of people always spent their particular free time to vacation as well as go to the outside with them friends and family or their friend. Are you aware? Many a lot of people spent that they free time just watching TV, or perhaps playing video games all day long. In order to try to find a new activity here is look different you can read any book. It is really fun for you. If you enjoy the book that you simply read you can spent all day every day to reading a guide. The book Visual Reconstruction (Artificial Intelligence) it is quite good to read. There are a lot of those who recommended this book. These folks were enjoying reading this book. In the event you did not have enough space to bring this book you can buy the e-book. You can m0ore effortlessly to read this book from the smart phone. The price is not very costly but this book provides high quality.

Larhonda Kennedy:

Is it you who having spare time after that spend it whole day by watching television programs or just telling lies on the bed? Do you need something totally new? This Visual Reconstruction (Artificial Intelligence) can be the answer, oh how comes? A book you know. You are and so out of date, spending your time by reading in this fresh era is common not a geek activity. So what these books have than the others?

Download and Read Online Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman #FJG0B4M7PQD

Read Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman for online ebook

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman 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 Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman books to read online.

Online Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman ebook PDF download

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman Doc

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman Mobipocket

Visual Reconstruction (Artificial Intelligence) By Andrew Blake, Andrew Zisserman EPub