Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems)
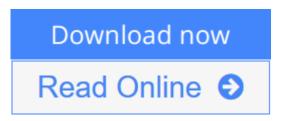
By Khalid Sayood Ph.D.

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D.

Introduction to Data Compression, Fourth Edition, is a concise and comprehensive guide to the art and science of data compression. This new edition includes all the cutting edge updates the reader will need during the work day and in class. It provides an extensive introduction to the theory underlying today's compression techniques with detailed instruction for their applications using several examples to explain the concepts.

Encompassing the entire field of data compression, this book covers lossless and lossy compression, Huffman coding, arithmetic coding, dictionary techniques, context based compression, scalar and vector quantization. New to this fourth edition is a more detailed description of the JPEG 2000 standard as well as speech coding for internet applications. A source code is also provided via a companion web site that gives readers the opportunity to build their own algorithms, choose and implement techniques in their own applications.

This text will appeal to professionals, software and hardware engineers, students, and anyone interested in digital libraries and multimedia.

- New content added to include a more detailed description of the JPEG 2000 standard
- New content includes speech coding for internet applications
- Explains established and emerging standards in depth including JPEG 2000, JPEG-LS, MPEG-2, H.264, JBIG 2, ADPCM, LPC, CELP, MELP, and iLBC
- Source code provided via companion web site that gives readers the opportunity to build their own algorithms, choose and implement techniques in their own applications

⬇ Download Introduction to Data Compression, Fourth Edition (...pdf

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems)

By Khalid Sayood Ph.D.

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D.

Introduction to Data Compression, Fourth Edition, is a concise and comprehensive guide to the art and science of data compression. This new edition includes all the cutting edge updates the reader will need during the work day and in class. It provides an extensive introduction to the theory underlying today's compression techniques with detailed instruction for their applications using several examples to explain the concepts.

Encompassing the entire field of data compression, this book covers lossless and lossy compression, Huffman coding, arithmetic coding, dictionary techniques, context based compression, scalar and vector quantization. New to this fourth edition is a more detailed description of the JPEG 2000 standard as well as speech coding for internet applications. A source code is also provided via a companion web site that gives readers the opportunity to build their own algorithms, choose and implement techniques in their own applications.

This text will appeal to professionals, software and hardware engineers, students, and anyone interested in digital libraries and multimedia.

- New content added to include a more detailed description of the JPEG 2000 standard
- New content includes speech coding for internet applications
- Explains established and emerging standards in depth including JPEG 2000, JPEG-LS, MPEG-2, H.264, JBIG 2, ADPCM, LPC, CELP, MELP, and iLBC
- Source code provided via companion web site that gives readers the opportunity to build their own algorithms, choose and implement techniques in their own applications

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. Bibliography

- Sales Rank: #674203 in Books
- Brand: Brand: Morgan Kaufmann
- Published on: 2012-10-30
- Original language: English
- Number of items: 1
- Dimensions: 9.30" h x 2.20" w x 7.90" l, 3.80 pounds
- Binding: Hardcover
- 768 pages

Download and Read Free Online Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D.

Editorial Review

Review
This text is a truly introductory treatment of the entire field of data compression, including lossless coding, speech coding, and audio coding, which are often neglected in other data compression books. Sayood's book has the very best tutorial treatment of lossless source coding anywhere, with detailed coverage of Lempel-Ziv, arithmetic, Golumb, and Tunstall coding, in addition to treatments of fixed and adaptive Huffman coding and context-based methods. Additionally, the book contains material on M-band quadrature mirror filter banks, the polyphase decomposition, and wavelets beyond what is normally found in any introductory text. I have used Sayood's book for a reference and as a text for a course on signal compression. I highly recommend it for adoption. **--Jerry D. Gibson, Professor of Electrical and Computer Engineering, University of California, Santa Barbara**

Khalid Sayood's book has long been the standard academic reference for those interested in Data Compression. I am very pleased to see his ongoing effort to keep the content timely with the release of the fourth edition this fall. If you want to be well versed in state of the art, ranging from simple lossless coding up to complex video compression, this is the only book I know that will stay with you on every step of the journey. **--Mark Nelson, Engineer at Cisco Systems, Inc and Senior Member of IEEE**

About the Author

Khalid Sayood received his BS and MS in Electrical Engineering from the University of Rochester in 1977 and 1979, respectively, and his Ph.D. in Electrical Engineering from Texas A&M University in 1982. In 1982, he joined the University of Nebraska, where he is the Heins Professor of Engineering. His research interests include data compression, joint source channel coding, and bioinformatics.

Users Review

From reader reviews:

Edward Capps:

Do you have favorite book? For those who have, what is your favorite's book? Publication is very important thing for us to find out everything in the world. Each publication has different aim or maybe goal; it means that reserve has different type. Some people feel enjoy to spend their time to read a book. They may be reading whatever they consider because their hobby is reading a book. What about the person who don't like examining a book? Sometime, person feel need book if they found difficult problem or maybe exercise. Well, probably you should have this Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems).

Mildred Bostwick:

This Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) book is absolutely not ordinary book, you have it then the world is in your hands.

The benefit you receive by reading this book will be information inside this guide incredible fresh, you will get data which is getting deeper a person read a lot of information you will get. This Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) without we know teach the one who looking at it become critical in contemplating and analyzing. Don't possibly be worry Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) can bring when you are and not make your bag space or bookshelves' become full because you can have it with your lovely laptop even telephone. This Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) having very good arrangement in word and layout, so you will not truly feel uninterested in reading.

Theresa Braun:

A lot of people always spent their free time to vacation or maybe go to the outside with them loved ones or their friend. Do you know? Many a lot of people spent these people free time just watching TV, or perhaps playing video games all day long. In order to try to find a new activity this is look different you can read the book. It is really fun for yourself. If you enjoy the book which you read you can spent the entire day to reading a book. The book Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) it doesn't matter what good to read. There are a lot of individuals who recommended this book. These folks were enjoying reading this book. In case you did not have enough space bringing this book you can buy the actual e-book. You can m0ore quickly to read this book from the smart phone. The price is not to fund but this book has high quality.

Antonio Sisson:

Do you have something that that suits you such as book? The publication lovers usually prefer to choose book like comic, quick story and the biggest one is novel. Now, why not trying Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) that give your satisfaction preference will be satisfied through reading this book. Reading addiction all over the world can be said as the method for people to know world a great deal better then how they react to the world. It can't be stated constantly that reading addiction only for the geeky man or woman but for all of you who wants to end up being success person. So , for all you who want to start studying as your good habit, you can pick Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) become your starter.

Download and Read Online Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. #PO8QVI14W9G

Read Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. for online ebook

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. 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 Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. books to read online.

Online Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. ebook PDF download

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. Doc

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. Mobipocket

Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. EPub