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:

Sally Norman:

Here thing why this particular Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) are different and reputable to be yours. First of all looking at a book is good however it depends in the content of it which is the content is as scrumptious as food or not. Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) giving you information deeper since different ways, you can find any book out there but there is no publication that similar with Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems). It gives you thrill looking at journey, its open up your own eyes about the thing which happened in the world which is might be can be happened around you. You can bring everywhere like in park, café, or even in your method home by train. When you are having difficulties in bringing the printed book maybe the form of Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) in e-book can be your alternative.

Nancy Herman:

Now a day folks who Living in the era everywhere everything reachable by connect to the internet and the resources in it can be true or not require people to be aware of each details they get. How a lot more to be smart in getting any information nowadays? Of course the correct answer is reading a book. Examining a book can help individuals out of this uncertainty Information mainly this Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) book as this book offers you rich details and knowledge. Of course the info in this book hundred % guarantees there is no doubt in it you may already know.

Brenda Anderson:

This book untitled Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) to be one of several books that will best seller in this year, that is because when you read this publication you can get a lot of benefit on it. You will easily to buy that book in the book store or you can order it by using online. The publisher of the book sells the e-book too. It makes you quicker to read this book, since you can read this book in your Smartphone. So there is no reason to you personally to past this e-book from your list.

Daryl Radford:

As we know that book is important thing to add our understanding for everything. By a e-book we can know everything we wish. A book is a range of written, printed, illustrated or even blank sheet. Every year seemed to be exactly added. This publication Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) was filled in relation to science. Spend your free time to add your knowledge about your scientific research competence. Some people has various feel when they reading any book. If you know how big benefit of a book, you can sense enjoy to read a e-book. In the modern era like now, many ways to get book you wanted.

Download and Read Online Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D. #1CREAMLQ4H2

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

1CREAMLQ4H2: Introduction to Data Compression, Fourth Edition (The Morgan Kaufmann Series in Multimedia Information and Systems) By Khalid Sayood Ph.D.