Communicating Pictures: A Course in Image and Video Coding

David R. Bull

Communicating Pictures: A Course in Image and Video Coding

David R. Bull

Communicating Pictures: A Course in Image and Video Coding David R. Bull

Communicating Pictures starts with a unique historical perspective of the role of images in communications and then builds on this to explain the applications and requirements of a modern video coding system. It draws on the author's extensive academic and professional experience of signal processing and video coding to deliver a text that is algorithmically rigorous, yet accessible, relevant to modern standards, and practical. It offers a thorough grounding in visual perception, and demonstrates how modern image and video compression methods can be designed in order to meet the rate-quality performance levels demanded by today's applications, networks and users. With this book you will learn:

- Practical issues when implementing a codec, such as picture boundary extension and complexity reduction, with particular emphasis on efficient algorithms for transforms, motion estimators and error resilience
- Conflicts between conventional video compression, based on variable length coding and spatiotemporal prediction, and the requirements for error resilient transmission
- How to assess the quality of coded images and video content, both through subjective trials and by using perceptually optimised objective metrics
- Features, operation and performance of the state-of-the-art High Efficiency Video Coding (HEVC) standard

- Covers the basics of video communications and includes a strong grounding in how we perceive images and video, and how we can exploit redundancy to reduce bitrate and improve rate distortion performance
- Gives deep insight into the pitfalls associated with the transmission of real-time video over networks (wireless and fixed)
- Uses the state-of- the-art video coding standard (H.264/AVC) as a basis for algorithm development in the context of block based compression
- Insight into future video coding standards such as the new ISO/ITU High Efficiency Video Coding (HEVC) initiative, which extends and generalizes the H.264/AVC approach

Download and Read Free Online Communicating Pictures: A Course in Image and Video Coding David R. Bull

---

From reader reviews:

Betty Ahlstrom:

Why don't make it to become your habit? Right now, try to prepare your time to do the important action, like looking for your favorite guide and reading a e-book. Beside you can solve your trouble; you can add your knowledge by the guide entitled Communicating Pictures: A Course in Image and Video Coding. Try to make book Communicating Pictures: A Course in Image and Video Coding as your buddy. It means that it can being your friend when you sense alone and beside those of course make you smarter than before. Yeah, it is very fortuned to suit your needs. The book makes you more confidence because you can know everything by the book. So , we should make new experience and knowledge with this book.

Robert Zamora:

Hey guys, do you wishes to finds a new book to learn? May be the book with the subject Communicating Pictures: A Course in Image and Video Coding suitable to you? The actual book was written by popular writer in this era. The book untitled Communicating Pictures: A Course in Image and Video Codingis the main of several books that will everyone read now. This specific book was inspired lots of people in the world. When you read this e-book you will enter the new dimension that you ever know just before. The author explained their strategy in the simple way, consequently all of people can easily to know the core of this e-book. This book will give you a lots of information about this world now. In order to see the represented of the world in this particular book.

Nathaniel Mitchell:

Often the book Communicating Pictures: A Course in Image and Video Coding will bring you to definitely the new experience of reading some sort of book. The author style to clarify the idea is very unique. If you try to find new book you just read, this book very appropriate to you. The book Communicating Pictures: A Course in Image and Video Coding is much recommended to you you just read. You can also get the e-book from the official web site, so you can more easily to read the book.

Roxie Gregory:

In this age globalization it is important to someone to receive information. The information will make professionals understand the condition of the world. The healthiness of the world makes the information simpler to share. You can find a lot of references to get information example: internet, paper, book, and soon. You can observe that now, a lot of publisher this print many kinds of book. The actual book that recommended to your account is Communicating Pictures: A Course in Image and Video Coding this publication consist a lot of the information on the condition of this world now. This specific book was represented just how can the world has grown up. The words styles that writer make usage of to explain it is easy to understand. The particular writer made some study when he makes this book. Honestly, that is why this book appropriate all of you.

Download and Read Online Communicating Pictures: A Course in Image and Video Coding David R. Bull #4WOUFRMLVY6

Read Communicating Pictures: A Course in Image and Video Coding by David R. Bull for online ebook

Communicating Pictures: A Course in Image and Video Coding by David R. Bull 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 Communicating Pictures: A Course in Image and Video Coding by David R. Bull books to read online.

Online Communicating Pictures: A Course in Image and Video Coding by David R. Bull ebook PDF download

Communicating Pictures: A Course in Image and Video Coding by David R. Bull Doc

Communicating Pictures: A Course in Image and Video Coding by David R. Bull Mobipocket

Communicating Pictures: A Course in Image and Video Coding by David R. Bull EPub