

FOREWORD

Multimedia technology, in its broadest sense, has become a powerful force in modern society. When used in appropriate ways, this technology has a tremendous capacity and ability to inform, to entertain and to educate people. Within a modern society, people are likely to be exposed to the effects of multimedia everywhere they go. For example, in a home environment, people are able to experience the audio-visual effects of their television sets, digital radios, MP3 players, hi-fi equipment and interactive games consoles. In schools and colleges, students use multimedia personal computers to study virtually every subject known to humankind. Similarly, in a hospital environment, medical staff can use multimedia technology in order to see screen-based images of the inside of a human body and also listen to the sounds that it makes. Within a business context, advertising and communication critically depend upon multimedia devices such as notebook computers, personal digital assistants and mobile phones. Using the latter, it is possible to send textual and/or sonic messages, hold conversations with other people, take pictures, record video clips and sound clips, access the Internet and send/receive electronic mail. Of course, things do not stop there! In a modern world, knowing ‘where you are’ is an important requirement in very many different contexts. This is particularly so in the case of one’s geographical location. Because of the importance of this requirement, many multimedia devices are ‘GPS-enabled’, that is, they can utilise the Global Positioning System (GPS)—based on orbiting satellites—in order to help their users navigate from one location on the Earth’s surface to another. Indeed, multimedia ‘sat-nav’ equipment is now often found as a standard accessory in many ‘luxury’ automobiles. These navigation devices are not only able to show their users appropriate and colourful screen-based maps of their location, they can also ‘speak out’ instructions on how to get from one geographical location to another. Such are the wonders of modern multimedia technology.

The first two books that I wrote on ‘multimedia’ were published way back in 1985 and 1989, respectively. So many things have happened and numerous changes have taken place in the years that have elapsed since the publication of my own books and the emergence of this new book by Ashok Banerji and Ananda Ghosh. In order to ‘set the scene’ for this new volume, let me turn the clock back and briefly describe how I ‘did’ multimedia some twenty years ago. It all began as a result of trying to overcome some of the very many shortcomings of the then available computer technology. I wanted to give my personal computer (PC) system (a *Commodore PET*) the ability to show high quality pictures, play sound clips of various sorts (music and audio narrations) and also deliver high-quality motion video. In order to achieve

this, I had to design and build appropriate software and hardware interfaces that would enable my PC to control various types of external devices—such as a tape recorder, a video-disc player and a random-access slide projector (amongst other things). In those days, this was not an easy thing to do. Of course, in order to enable users of my multimedia equipment to control the array of different devices that were involved in any given application, I also had to create a multimedia authoring language (called *MUMEDALA*)—the details of which were described in another of my books. This tool enabled synchronised and coordinated multimedia presentations to be developed without the need to have any deep knowledge of the underlying technology. As I have hinted above, technology moves on at a tremendous pace. So, enough of the past! It's time to turn the clock forward and consider the present and likely future developments of this important area—as they are portrayed in the contents of this new and exciting book.

The opening chapters of the book provide a very sound foundation upon which to base the subsequent material. Following on from a discussion of the essential preliminaries—which are covered in Chapters 1 through 4—the authors move on to deliver sections that deal with various individual media. The use of text is covered in Chapter 5 while appropriate deliberations on the use of images and graphics are presented in Chapters 6 and 7, respectively. Following the treatment of visual media, Chapter 8 considers the use of audio as a multimedia resource. Subsequently, as examples of audiovisual resources, video and animation are described and discussed in Chapters 9 and 10. The next section of the book (Chapters 11 and 12) explores media integration and the importance of this within the context of the Internet and the World Wide Web. Finally, in Chapter 13, the authors look at some possible future directions of development for multimedia technology and its potential applications.

I believe any new contribution to the growing literature on multimedia has to achieve three basic aims. First, it has to define the current 'rules of the game' by explaining the underlying theory and 'folklore' of the subject—as it exists at the time of writing. Second, it has to establish a skill base for those who would wish to practice the subject, that is, those who want to become seriously involved in the design and creation of useful and effective multimedia artefacts. Third, it has to establish credence in terms of its usefulness, accuracy and the reliability of its content. I believe this new book fulfils all of these requirements. Each of the authors of this book has had a significant and substantial amount of experience both in relation to the application of different forms of pedagogy and, of course, in the design and application of multimedia techniques for the solution of real-world problems in a variety of different contexts. This, I believe, provides credence both in relation to what they have written and how they have presented their material to readers. I believe that the authors have put together a valuable and comprehensive collection of chapters that together reflect relevant current theory and practice within this important area.

It was a great honour to be invited to write the foreword to this book. I have worked in the area of multimedia technology for many decades and I have come to understand both the power and the value that it can bring to society. As a 'fifth' reader of the book, I enjoyed it immensely and I commend it to all those who wish to study this exciting and stimulating area.

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