

In conclusion, this is a slightly unhappy juxtaposition of a research monograph and a survey of numerical methods in uncertain reasoning. Unhappy mainly because the work required to produce such a comprehensive volume has been to a certain extent at the expense of the clarity of presentation of the important novel aspects of the work reported in the book. Further signs that the burden slightly overloaded the authors are given by a number of errors present in the cross-referencing in the text, and omissions in the references (for example, many of the references in Chapter 4 in particular are not listed at the back of the book). But it is an important statement of current research on numerical methods in uncertain reasoning, and is a significant contribution to the literature for that.

**A beginner's book of TEX** by Raymond Seroul and Silvio Levy, Springer-Verlag, Berlin, 1991, DM 58, ISBN 0-387-97562-4.

TEX is a powerful document preparation program, developed by Donald E Kuth to produce high quality typesetting, especially for technical and mathematical texts (it also has enough features to make it useful in other fields). It is a markup system, where the document text is interspersed with typesetting instructions, and it needs to be run through the TEX program before the formatted document can be viewed. The TEX program produces a page description in a device-independent form that needs in turn to be fed into an appropriate driver for it to be displayed on screen or to be sent to the printer.

TEX is macro programmable. There are a number of macro packages available which provide very high level commands for creating most common styles of documents with a relatively small amount of formatting effort. Perhaps one of the most widely used of these macro packages is Latex.

TEX is public domain and is available for a number of hardware platforms; PC compatibles, Unix workstations, etc. TEX documents only contain printable characters from the ASCII character set, making their transfer by electronic mail particularly straightforward.

*A beginners book of TEX*, as the name implies, does not aim to be a replacement for *The TEXbook*, written by Knuth himself, which remains the definitive reference for TEX. This book aims to provide a more accessible alternative for users who do not need to know the more obscure features of TEX.

The book has a large combined dictionary index section which makes up roughly one third of the book. You may need to refer to this section to follow some of the examples in the book that contain TEX features before they are actually introduced. The descriptions for the entries in this part are good enough to make the book useful for reference.

The main part starts with an introductory chapter which, among other things, gives an overview of the different stages involved in processing a TEX document. This chapter provides useful explanations for some of the cryptic prompts and error messages that are displayed when TEX encounters errors while processing a document.

It then quickly covers the basics of TEX in the next seven short chapters, using examples to demonstrate the application of each feature. The remaining five chapters cover the typesetting of mathematics and the more advanced features of TEX programming.

As a TEX novice whose experience of TEX was limited to what is required to use Latex to format simple non-mathematical documents (which is very little!), I found it much easier to negotiate my way through this book than Knuth's *TEXbook*. This was especially so when looking up a particular TEX feature.

How useful this book will be to beginners I think depends very much on how they intend to use TEX. If one of the existing macro packages like Latex meets all your formatting needs, then this book is going to be of limited use to you. However, if your formatting requirements are more demanding, and on occasions you need to use raw TEX to achieve a desired layout, then this book should prove very useful.