

THE TOP TEN BOOKS IN INFORMATION TECHNOLOGY

A good textbook has to have stood the test of time. All these have, and are still in widespread use.

Professor Judith Bishop, Department of Computer Science

1. Modern Compiler Implementation in Java

Andrew W. Appel, *Modern Compiler Implementation in Java*, 2nd Edition, Cambridge University Press, 2002 (1st ed 1998) ISBN 0-521-82060-X. Using this textbook, COS341 students write a compiler for Mini-Java in 14 weeks. The phased approach is both classic and practical, and the use of Java with the visitor pattern an object lesson in fine programming.

2. Distributed Operating Systems

Andrew S Tanenbaum, *Distributed Operating Systems*, Prentice-Hall, 1995, ISBN 0-131-43934-0, and (with Maarten van Steen) *Distributed Systems - Principles and Paradigms*, Prentice-Hall 2002, ISBN 0-131-21786-0. VRS780 students can benefit from both books as the first has some of the classical algorithms that were removed to make way for more on comparative technology in the latest version.

3. Java Gently

Judith Bishop, *Java Gently* (3rd edition), Addison-Wesley, 2001 (1st ed 1997) ISBN 0-201-71050-1. So many people world-wide like this book (translated into four languages). For me, it is the progression of knowledge and the meaningful examples that make it stand out among so many other first year programming texts.

Professor Theo Bothma, Head of Department of Information Science

4. Information retrieval interaction

Ingwersen, Peter. 1992. *Information retrieval interaction*. London: Taylor Graham. Pages: 246. ISBN: 0-947-56854-9. Full text also available in electronic format: <http://www.db.dk/pi/iri/> It is one of the most cited textbooks in the information retrieval field, and especially contributed to research in the design of information retrieval systems, the cognitive view of information retrieval and information seeking behaviour.

5. The information age: economy, society and culture: the rise of the network society.

Castells, M. 1996. *The information age: economy, society and culture: the rise of the network society*. Oxford: Blackwell. ISBN: 0-631-22140-9.
 Castells, M. 1997. *The information age: economy, society and culture: the power of identity*. Oxford: Blackwell. ISBN: 1-405-10713-8.
 Castells, M. 1998. *The information age: economy, society and culture: end of millennium*. Oxford: Blackwell. ISBN: 1-557-86871-9.
 Castells' trilogy is the most powerful and persuasive study on the emergence of an information age yet to be published. This monumental work does more than any other to give credibility to the idea of a global information society.

6. Communication for development in the Third World: theory and practice.

Melkote, Srinivas. 1991. *Communication for development in the Third World: theory and practice*. Newbury Park, Calif: Sage. ISBN (US) 0-803-9968-3. This work contains a still relevant discussion on the cultural imperialism contained in views about and practices in the communication of information to the developing world. It is a source that motivates students to accept the challenge of stepping out of a social and cultural comfort zone and recognise that more than one perspective exists.

7. The politics of publishing in South Africa.

Nicholas Evans and Monica Seeber (eds) 2000. *The politics of publishing in South Africa*. London: Holger Ehling Publishing and Scottsville: University of Natal Press. ISBN 0-953-72621-5. This is the first text that analyses the issues surrounding book publishing in South Africa; that treats publishing as a strategic industry; and that provides a social and historical context for the industry. Its overview of the development of indigenous publishing in South Africa is groundbreaking, as is its linkage of publishing to other fields of critical study, including writing, media studies and language development.

Professor Carina de Villiers, Head of Department of Informatics

8. In the age of the smart machine – the future of work and power.

Shoshana Zuboff 1988. *In the age of the smart machine – the future of work and power*. USA: Basic Books Inc. ISBN 0-465-03211-7 The book covers history, psychology and politics of work; the promise, threat and challenge of computers. This is one of the best studies on the crucial issue of how technologies demand – but not guarantee – a more flexible and democratic work environment. Although published in 1988, it is still insightful and indeed a seminal work.

9. Social Theory and Philosophy for Information Systems.

John Mingers & Leslie Willcocks (eds) 2004. *Social Theory and Philosophy for Information Systems*. Chichester: John Wiley & Sons. ISBN: 0-470-85117-1. This book broadens research within the Information Systems field. It provides a vital, accessible and critically authoritative narrative on the relevance of the thinking of Husserl, Heidegger, Adorno, Habermas, Foucault, Giddens, etc. to Information Systems Research.

10. Making a world of difference: IT in a global context.

Geoff Walsham 2001. *Making a world of difference: IT in a global context*. Chichester: John Wiley & Sons. ISBN: 0-471-87724-7. This book explores the social aspects of computerisation, using a range of detailed case studies, analysed from a variety of conceptual viewpoints. It is argued that we should be using IT to support a world in which diversity and difference are respected.

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