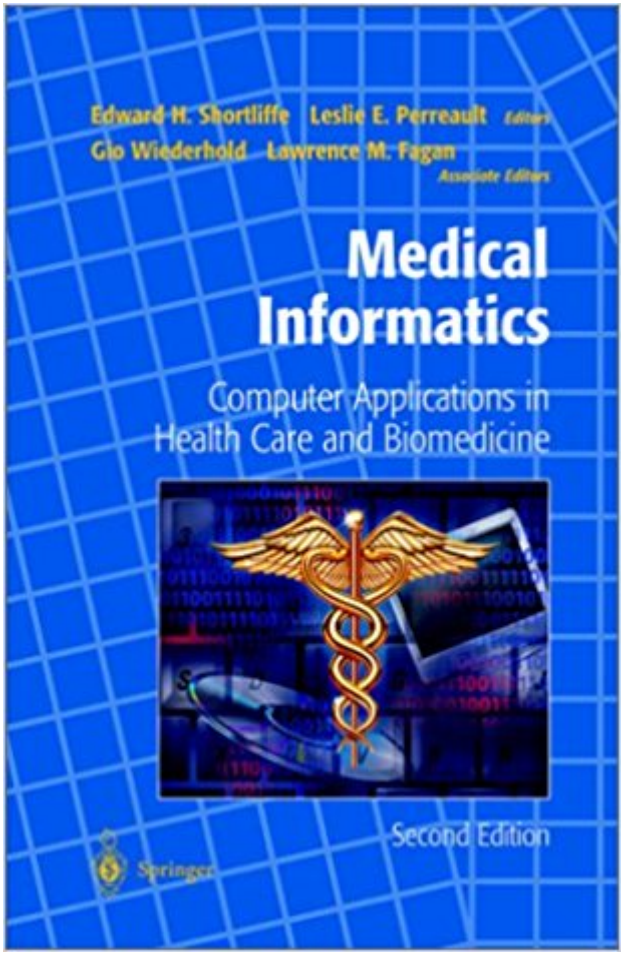
Medical Informatics: Computer Applications In Health Care And Biomedicine (Health Informatics)



Synopsis

The practice of modern medicine and biomedical research requires sophisticated information technologies with which to manage patient information, plan diagnostic procedures, interpret laboratory results, and carry out investigations. Medical Informatics provides both a conceptual framework and a practical inspiration for this swiftly emerging scientific discipline at the intersection of computer science, decision science, information science, cognitive science, and biomedicine. Now revised and in its second edition, this text meets the growing demand by practitioners, researchers, and students for a comprehensive introduction to key topics in the field. Authored by leaders in medical informatics and extensively tested in their courses, the chapters in this volume constitute an effective textbook for students of medical informatics and its areas of application. The book is also a useful reference work for individual readers needing to understand the role that computer can play in the provision of clinical services and the pursuit of biological questions. The volume is organized so as first to explain basic concepts and the to illustrate them with specific systems and technologies. The book has been extensively revised and updated for this second edition, and new topics include: Ã Â¿ Standards in Medical Informatics Ã Â¿ Ethics of Health Informatics: Users, Standards, and Outcomes Ã Â¿ Evaluation and Technology Assessment Ã Â¿ Public Health and Consumer uses of Health Information: Education, Research, Policy, Prevention, and Quality Assurance Ã Â¿ Bioinformatics Edward H. Shortliffe, M.D., Ph.D., is professor and chair of the department of Medical Informatics at Columbia UniversityÃ Â¿s College of Physicians and Surgeons. A member of the Institute of Medicine and a regent to the American College of Physicians-American Society of Internal Medicine, he is also a fellow of the American College of Medical Informatics and serves on the PresidentÃ Â¿s Information Technology advisory Committee. Leslie E. Perreault, M.S., is a director at the First Consulting Group in New York City. A graduate of Stanford UniversityÃ Â¿s training program in medical informatics, she has extensive experience as a consultant to healthcare organizations, especially regarding clinical systems and their integration to the enterprise. Gio Wiederhold, Ph.D., is professor of computer science at Stanford University, with courtesy appointments in Medicine and Electrical Engineering . He is a fellow of the American College of Medical Informatics, the IEEE, and the ACM.

Book Information

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Customer Reviews

From the reviews of the third edition: "The third edition, renamed Biomedical Informatics in recognition of the converging course of clinical systems with systems that support molecular biology and genetics Ã¢â ¬Â¦ shows substantial growth in both pages and breadth of coverage relative to earlier editions. Ã¢â ¬Â¦ overall the book is commendably readable Ã¢â ¬Â¦ . In addition to its primary audience of students Ã¢â ¬Â¦ the textÃ¢â ¬â„¢s accumulated wisdom and lessons learned can help educate any health professional responsible for selecting information systems to be acquired and used in office and institutional settings." (Daniel Masys, JAMA, Vol. 296 (21), December, 2006) "An introduction to an important area in biomedical informatics with suggested additional reading and highlighted concepts. The book is intended to be used in formal courses by health professions students and by biomedical computing students. In addition, it is designed to serve as a reference for established practitioners, conveying concepts in biomedical informatics while providing illustrative examples. Ã¢â ¬Â¦ is an essential contribution to enhancing education in biomedical informatics. The update is timely and relevant and it compares especially favorably in breadth as an introductory text." (David M. Liebovitz, DoodyÃ¢â ¬â„¢s Review Service, July, 2008) --This text refers to the Digital edition.

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This seems to be the gold standard in the field, and deservedly so. I’ve seen it selected as the book

for almost every intro Informatics course I’ve been exposed to. I’ve read all but three chapters (13,15, and 21) of it and found that in general the chapters are quite strong. Because it is an edited volume the quality and style of the chapters are mixed. The chapters are, without exception, meticulously sourced making the references section a real gem. The questions at the end of the chapter wouldn’t be close to adequate for a self study book (I’d say they are only slightly more than perfunctory).I think this book has two limitations: - Lacks any substantive cross chapter continuity (on the upside this means it can really be read in almost any order). - The chapter length to depth ratio is unfavorable. At an average of 40ish pages the chapters should really be able to get into real technical depth; instead, it seems to gloss over the technical details with repetitions of "gee whiz" platitudes.I think this book has one annoyance: - A lot of the contents (particularly in the first few chapters of the book) have an "in the future we’ll all drive flying cars" feel that makes them more dated than the publication date would suggest.Bottom line: best-of-breed, recommended.

Came as promised

great deal

Great

This book covers comprehensive topics in biomedical informatics and its applications. In particular, UNIT I (Recurrent themes in biomedical informatics) presents biomedical knowledge which are essential to computer professionals for effective system development. On the other hand, UNIT II (Biomedical informatics applications) provides useful illustrations of current information systems in the field. I reckon that the most interesting applications are Consumer Health Informatics and Telehealth; Imaging Systems in Radiology and Clinical Decision Support Systems.

I’m taking some online classes in healthcare IT and this book was mentioned several times, so I thought I’d get a copy. I wouldn’t want to just sit down and read it, but it IS a great reference source. It’s BIG; 850 pages plus another couple of hundred of references, glossary and index. It’s got lotsa stuff! I didn’t have any trouble finding whatever I was looking for, though. Just about perfect for what I’m doing.

I just started this book, and it seems to be a decent introduction to the field. I understand it must be

difficult to write an intro text that serves a wide audience, but two things:1. A little verbose. I have read 3 chapters so far, and it seems like the book does not need to be quite so thick.2. The diagrams in chapter 1 especially are an embarrassment to textbook writers, editors, and publishers, and an insult to anyone who purchased this book. If anyone is wondering what makes students so angry at spending $100 for a textbook, note the gem of a diagram on page 17. It’s a mess of squiggly lines connecting boxes of text. What’s that thick black line running through the center? Some sort of trend in a graph? No, it’s the Internet, in what is presumably a network diagram. It really looks like it was drawn by someone in MS Paint, who was unable to discover the tool that draws a straight line.3 stars because I found the text useful, but really, someone should be ashamed to have published this with such miserable diagrams.

I am using this book in a graduate level course and find it to be very complete in its discussion of this broad topic. The author, Shortliffe, is now President of the American Medical Informatics Association. If you purchase this book, you will be doing best to get just the textbook, and not the digital version, the so-called "Upgrade" to read online.The annotations features for highlighting and leaving bookmarks are almost always "temporarily unavailable". I was surprised to find out today that I had reached the "usage limit" on reading my book online, and was denied further access. That was a pretty big shock to me, as I had paid to be able to access the book when i did not want to carry around the rather heavy textbook.When you are locked out of the book, you are not given any method for rectifying this except to send an email to customer service.I won’t be purchasing the digital media "Upgrades" to any more books.Despite that experience, you will be very happy you bought this if you have any interest in biomedical informatics. Note that this does focus on the "medical" side of biomedical informatics, and is not a bioinformatics primer.

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