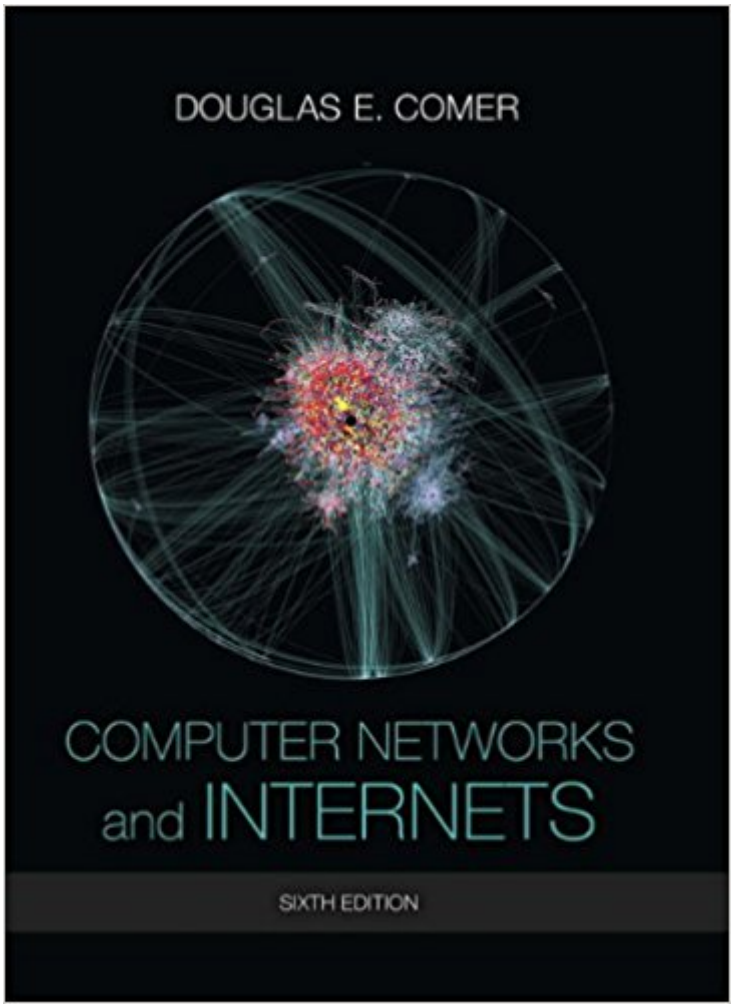
Computer Networks And Internets (6th Edition)



Synopsis

Appropriate for all introductory-to-intermediate courses in computer networking, the Internet, or Internet applications; readers need no background in networking, operating systems, or advanced mathematics. Ã Â Leading networking authority Douglas Comer presents a wide-ranging, self-contained tour of the concepts, principles, and technologies that enable todayÃ¢â ¬â„¢s Internet to support applications ranging from web browsing to telephony and multimedia. Comer begins by illuminating the applications and facilities offered by todayÃ¢â ¬â„¢s Internet. Next, he systematically introduces the underlying network technologies and protocols that make them possible. With these concepts and technologies established, he introduces several of the most important contemporary issues faced by network implementers and managers, including quality of service, Internet telephony, multimedia, network security, and network management. Comer has carefully designed this book to support both top-down and bottom-up teaching approaches. Students need no background in operating systems, and no sophisticated math: Comer relies throughout on figures, drawings, examples, and analogies, not mathematical proofs. Ã Â Ã Â Teaching and Learning Experience This program will provide a better teaching and learning experienceÃ¢â ¬â •for you and your students. Broad Coverage of Key Concepts and Principles, Presented in a Technology-independent Fashion: Comer focuses on imparting knowledge that students will need regardless of which technologies emerge or become obsolete. Flexible Organization that Supports both Top-down and Bottom-up Teaching Approaches: Chapters may be sequenced to accommodate a wide variety of course needs and preferences. An Accessible Presentation that Resonates with Students: Comer relies throughout on figures, drawings, examples, and analogies, not mathematical proofs. Keep Your Course Current: Content is refreshed to provide the most up-to-date information on new technologies for your course.

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Customer Reviews

Dr. Douglas Comer is an internationally recognized expert on TCP/IP protocols, computer networking, and the Internet. One of the researchers who contributed to the Internet as it was being formed in the late 1970s and 1980s, he was a member of the Internet Architecture Board, the group responsible for guiding the Internet's development. He was also chairman of the CSNET technical committee, a member of the CSNET executive committee, and chairman of DARPA's Distributed Systems Architecture Board. Ã Â Comer has consulted for industry on the design of computer networks. In addition to giving talks in US universities, each year Comer lectures to academics and networking professionals around the world. Comer's operating system, XINU, and implementation of TCP/IP protocols (both documented in his textbooks), have been used in commercial products. Ã Â Comer is a Distinguished Professor of Computer Science at Purdue University. He is currently on leave from Purdue, serving as VP of Research Collaboration at Cisco Systems. Recently, Comer has taught courses on networking, internetworking, computer architecture, and operating systems. He has developed innovative labs that provide students with the opportunity to gain hands-on experience with operating systems, networks, and protocols. In addition to writing a series of best-selling technical books that have been translated into 16 languages, he served as the North American editor of the journal Software Ã¢â ¬â •Ã Â Practice and Experience for 20 years. Comer is a fellow of the ACM. For additional information, visit his web site.

I really like this little book as it fills in a niche in networking literature - that of providing a clear and quick picture of the main ideas and trends, great for cramming for a job interview or an exam. I recently bought many networking books,and although I primarily use the new editions of Steven’s books "Unix Network Programming" + "Internetworking with TCP/IP" -recomended by the very best hackers around - this little book from Comer complements them nicely by giving a sweet overview without getting bogged down by technicalities as in a professional manual, and without getting lost in useless highlevel business stuff as in many other books. So I mainly use these three books in my practice: Stevens UNP+TCP/IPv1, with this one for a quick, focused and very useful read.Reasons

for not getting 5 stars: The writing style is not the most elegant, but it is to-the-point, differently than many other networking books. The content is incomplete (mostly by design, to keep it short); it is just an overview. In some chapters, the level of overview works and is informative, but in others it is too shallow and can lead to misconceptions. For instance, in explaining UDP it doesn't say that many applications implement other communication features on top of it rather than using plain UDP, giving the false impression UDP can never be used for (semi-) reliable transfer.Despite this, the book does provide simple but useful semantic insight that is hard to extract from other books. For instance, quickly saying that UDP has a port and how it works is not very enlightening as a summary since you could look that up anywhere on the Web; On the other hand, saying that a port is sort of an abstraction for a process ID, as the author does, adds something quite valuable to a quick overview. If you use this book to complement others, then it works fine as it is; it is refreshing that chapters are really short, and more in-depth info should be kept elsewhere as to not clutter this much-needed and useful book.

This review compares the following four books:Computer Networks by Peterson and Davie (P & D)Computer Networks by TanenbaumComputer Networks by Comer / Internetworking with TCP/IPComputer Networking by Kurose and Ross (K & R)By far the best book in the list is "Computer Networking" by Kurose and Ross. This book covers all of the essential material that is in the other books but manages to do so in a relevant and entertaining way. This book is very up to date as seen by the release of the 5th Ed when the 4th Ed is barely two years old. There are lots of practical exercises using wireshark and the companion website is actually useful and relevant. The attitude of this book with regard to teaching networking concepts could be summed up as "try it out and see for yourself". One interesting thing to note is that the socket programming example are all in Java.Next up is the Peterson and Davie book which covers everything that Kurose and Ross discuss but is slightly more mathematical in how it goes about things. There are a lot more numerical examples and defining of formulas in this book which is fine by me and in no way detracts from the book. Also the socket programming examples are in C which is a little more traditional. The points where this text loses ground to K & R is that it doesn't have the practical application exercises that K & R has and it also doesn't extend the basic networking theory that is covered to modern protocols like K & R.The two Comer books come next. Comer's "Computer Networks" book is probably the most introductory book out of this whole list and is more of a survey of networking topics that doesn't cover anything in any real depth. Still, this is an excellent book in that it is a quick clear read that is very lucid in its explanations and you can't help feeling that you understand

everything that is covered in the book. Comer's TCP/IP book is the equivalent of the other authors' computer network books and in that respect it is pretty average. It covers all of the relevant material and in a manner which is more than readable but that is all. There is nothing exceptional about the book which stands out from the rest.Last comes Tanenbaum's book from the author who is probably most famous for his OS books. This is probably the most technical and detailed of the books with lots of sample C code belying is experience with operating systems and their network stack code. The weak point of this book is that all of the code and technical minutia might prevent the reader from seeing the forest for the trees. Unless you are trying to learn how to program your own network stack for a Unix/Linux system, then I would get either the K & R book or the P & D book to learn networking for the first time. This book would best be served as a reference in which case the technical nature of the book becomes a benefit rather than detracting from the text.

A bit outdated includes a lot of irrelevant data. Many of the history lessons of old TCP/IP stacks are irrelevant and unnecessary. Great reference for learning the TCP/IP Stack. Goes into more than enough detail for each layer, explaining and giving good examples for each. Not the best for a summary, in my opinion, but it is great if you want to learn about the TCP/IP stack in great detail, as well as a reference for headers/packet layouts for each layer. This has everything you need.

this book by Comer covers the breadth of networking. It's quite deep in some subjects, like history of early network technology and mediums outside of copper wires. It could have a better programming section. Theres like 1 network programming example and a library that's supposed to make network programming easier but sense it just wraps the sockets api, Its advantage is unclear. A little explanations of patterns of use of the socket functions as a whole would be better. Most of these functions have analogs in python (its pritty much a direct translation function per function) perhaps in this garbage collection, endian free language, you can learn more about the pattern better. The section on IPv6 is quite nice.

Great shape

out of date technology for 2015. Its hard to find a book that is up to date. I don't have any suggestions to resolve this dilemma. This book is good for learning about technology but when you finish reading it you still will be behind todays technology.

Had the 3rd and needed an update, amazing as usualy

Very pricey, but an excellent book that should be part of any network admin’s library.

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