theories or analytical tools for dealing with simulation and modeling, Jain has done an effective job of pulling together into a single source the substance of the mathematics traditionally involved in these processes. The book includes as complete a discussion as I have seen on random-number generators (including techniques for testing random-number generators).

The book is well organized from a variety of standpoints. Each part (there are six) is preceded by a section that summarizes what the reader can expect to learn and is followed by an annotated list of books and articles for further reading. A more comprehensive list of references appears before the complete and well-organized subject index. Following the discussions of most major concepts, the author includes suitably highlighted summary boxes that consist of bullet tiems serving as reminders of the various components of the concept—a "checklist" of sorts. I found these especially helpful. Throughout the text are dozens of examples and exercises (most based on hypothetical computer systems); solutions to some of the exercises are included. It would be interesting to chose a particular "real" computer system and develop a companion text/workbook that applies the theories and techniques that Jain describes; this would do much to demonstrate the value of various analytical methods. Given Jain's professional affiliation, a focus on VAX/VMS or DECsystem/ULTRIX systems would be appropriate.

A concern that I have about the book is its relevance in today's distributed, client/server environment. While occasional references are made to the difficulties involved in studying computer complexes made up of networked, dissimilar machines providing a wide variety of processor, I/O, network, and applications services, there is little in the way of tools to help us deal with such arrangements. In general-purpose environments it may not be sufficient to look at distributed system nodes as discrete entities; a much more complex analysis may be required, including a dimension to account for the "distributedness".

The troublesome number of typographical errors in the first printing have been reported and will be fixed in the forthcoming second printing. A section involving the derivation of formulas for linear regression parameters contained typos that had two of us scratching our heads for a couple of hours!

I expect this book will earn a place on my shelf as one of those valued, dog-eared references. I enthusiastically recommend it to anyone who is seriously interested in measuring or predicting performance of discrete computer systems.

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ERRATA

Topological Indices and Real Number Vertex Invariants Based on Graph Eigenvalues or Eigenvectors [*J. Chem. Inf. Comput. Sci. 31*, 517–523 (1991)] By Alexandru T. Balaban,* Dan Ciubotariu, and Mihai Medeleanu. Organic Chemistry Department, Polytechnic Institute, Splaiul Independentei 313, 77206 Bucharest, Romania, and Organic Chemistry Department, Polytechnic Institute, Timişoara, Romania.

Pages 518–520. Some values in the lines corresponding to 33MM-C6 must be corrected. In Table II, the line should read 4263, 3159, 2416, 2776, 3454, 4528, 3597, 3597, and 17.443. In Table III, VAD1, VAD2, VAD3 values are 17.44265, 2.18033, and 2.63577, respectively. In Table IV, VED1 and VED3 values are 2.77893 and 0.79892, respectively.

Pages 521 and 522. Some values in the lines corresponding to 4E-2M-C6 must be corrected. In Table V, VAD1, VAD2, and VAD3 values are 22.62042, 2.51338, and 3.01349, respectively. In Table VI, VED1 and VED3 values are 2.94909 and 0.97614, respectively.