

these, at least for the purposes of this book, need not have been regarded as Holy Writ. Lastly, although the programs and numerical results are printed in colour, and quite clearly enormous trouble has been taken in preparation, in offering a book of 220 pages at DM 56 (i.e., at least \$14.00 in the United States) the publishers have come very near pricing the book clean out of the student's market.

It is clear that Professor Nickel has initiated a new *genre* in works on numerical analysis: his book should be read by anyone who is, or proposes to be in any way, associated with numerical computations, and studied thoroughly by any person intending to specialize in the subject.

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71[Z].—GORDON RAISBECK, *Information Theory, an Introduction for Scientists and Engineers*, The M. I. T. Press, Cambridge, Mass., 1964, x + 105 pp., 21 cm. Price \$4.00.

Information Theory, an Introduction for Scientists and Engineers discusses the fundamental ideas of Information Theory and their applications to signal transmission and detection. It is addressed to the scientist or engineer with no specialized knowledge of Information Theory, but with some facility in mathematics. The liberal use of mathematics enables the author to include a great deal of substance. It is not, however, overloaded with mathematical detail and reads quite well.

The first chapter treats the problem of assigning a quantitative measure of "information." The second and third chapters are addressed to the noiseless and noisy coding problems, respectively, including Shannon's fundamental theorems on noiseless and noisy coding. The last two chapters discuss detection problems. The book concludes with a descriptive bibliography for the benefit of those who wish to do further reading on this subject.

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