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Book Reviews

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James L. PETERSON
Petri Net Theory and the Modeling of Systems
Prentice-Hall, New York, 1981. 290pp. £16.05.

This book's preface claims that 'the presentation and organization is (*sic*!) suitable both for individual study by the practicing professional and for organized graduate study in computer science'. I write from the point of view of the former but also as someone who has been waiting for a good book on the subject to turn up.

The book has satisifed part of my needs. It is a readable introduction to what Petri nets are and to the formal theory related to them. It contains a large annotated bibliography (although only up to 1979) which would be of use to anyone studying the subject further. It has exercises and topics for further study, which I presume would be of use for classes, but there are no answers, which I find annoying. The most serious deficiency is that the examples of using Petri nets are too brief and somewhat dated. While some 40 pages are devoted to modelling, one thorough example would have been worthwhile. I am left with the impression that Petri nets have become just an interesting topic in pure mathematics, for which the book serves as good text. That may be true; otherwise someone needs to write a book on how to use Petri nets to model and analyse systems.

PETER RADFORD
Chelmsford

C. E. VANDONI (ED.)
Eurographics 80
North Holland, Amsterdam, 1980. 340pp. $44.00.

This is the complete proceedings of the Eurographics 80 Conference and Exhibition held at the University of Geneva in September 1980. I always approach such a volume with some concern as I know that I will be faced with countless different styles of presentation, different type faces, poorly reproduced figures, etc. Eurographics 80 did not let me down—indeed there are examples of *hand drawn* graphics in the text, quite incredible at a graphics conference.

Some twenty-nine papers presented are subdivided under seven subject headings: Man-Machine Interaction based on Core System, Algorithms, Special Purpose Graphics Packages, Interdisciplinary Applications, General Purpose Graphics Packages, Distributed Graphics and Raster Graphics Systems. There is also a section entitled 'Industrial Seminar' which was obviously linked to the exhibition and should have been omitted as it serves no useful purpose in this volume. It is impossible to review all the papers but as is always the case there are several useful papers and a few which manage to say very little in anything up to eight pages of text.

In the Algorithms section the paper by K. Altimimi (Perkins Engines) describes an interesting technique for three-dimensional Mesh Generating using a Turnkey graphics system (Computervision). Under Graphics Packages P. Comninos and G. Webster describe CGAL currently under development at Teesside Polytechnic—an example here of bad proof reading with viewport and viewpoint being confused. In the Interdisciplinary Applications DRAW (K. Bicknell, Rothamsted) shows how the apparently trivial exercise of producing chemical formulae is in fact a very interesting piece of work. On the other hand J. Weber, G. Bernardinelli, J. J. Combremont and M. Roch (University of Geneva) convince me even more that three-dimensional ball and stick representation of molecules can only be satisfactorily displayed with grey scales pictures—their line plots just do not work. Simpleplot makes its customary appearance in the General Purpose Graphics Packages, this time in Algol68 guise. The surprisingly small section in Raster Graphics has a couple of interesting papers—particularly Comptrol® (S. E. Ranjbaran, R. J. Swallow of Advance Technology Systems, New Jersey).

Eurographics 80 is a record of what appears to have been a useful conference—but I do wish publishers would spend a little less on producing hard back (paper back would be sufficient) covers and more on standardizing the presentation.

K. P. TEARE
Salford

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