

Proceedings
of the
1980 WINTER
SIMULATION CONFERENCE



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Proceedings of 1980 WINTER SIMULATION CONFERENCE

Edited by:

Tuncer I. ÖREN (Editor-in-chief)

Charles M. SHUB

Paul F. ROTH



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THE 1980 WINTER SIMULATION CONFERENCE
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Proceedings of
THE 1980 WINTER SIMULATION CONFERENCE

THE WINTER SIMULATION CONFERENCES

CONFERENCE	General Chairman Program Chairman
1. <i>Conference on the Applications of Simulation using GPSS</i> November 1967 Hotel Roosevelt, New York	Harold Hixson Julian Reitman
2. <i>Second Conference on the Applications of Simulation</i> December 1968 Hotel Roosevelt, New York	Julian Reitman Arnold Ockene
3. <i>Third Conference on the Applications of Simulation</i> December 1969 International Hotel, Los Angeles	Arnold Ockene Philip J. Kiviat
4. <i>Fourth Conference on the Applications of Simulation</i> December 1970 Waldorf-Astoria Hotel, New York	Philip J. Kiviat Michel Araten
5. <i>The 1971 Winter Simulation Conference</i> December 1971 Waldorf-Astoria Hotel, New York	Michel Araten Joseph Sussman
6. <i>The 1973 Winter Simulation Conference</i> January 1973 St. Francis Hotel, San Francisco	Joseph Sussman Austin Hoggatt
7. <i>The 1974 Winter Simulation Conference</i> January 1974 Washington Hilton Hotel, Washington, D.C.	Michael F. Morris Harold Steinberg
8. <i>The 1976 Bicentennial Winter Simulation Conference</i> December 1976 National Bureau of Standards, Gaithersburg, MD	Harold J. Highland Thomas J. Schriber
9. <i>The 1977 Winter Simulation Conference</i> December 1977 National Bureau of Standards, Gaithersburg, MD	Robert G. Sargent J. William Schmidt
10. <i>The 1978 Winter Simulation Conference</i> December 1978 The Deauville Hotel, Miami Beach, FL	Larry G. Hull Norman R. Nielsen
11. <i>The 1979 Winter Simulation Conference</i> December 1979 Holiday Inn Embarcadero, San Diego, CA	Mitchell G. Spiegel Robert Shannon
12. <i>The 1980 Winter Simulation Conference</i> December 1980 Orlando Marriott, Orlando, FL	Paul F. Roth Tuncer I. Ören

FROM THE PROGRAM CHAIRMAN

As an average, one simulation conference is held every month. The net result of this is that there are a few hundred simulation conference proceedings. In my private library, I have over one hundred proceedings of simulation conferences. Some of them concentrate on involvements of specialists. It is possible to find, for example, a simulation conference proceedings with seventy "Associate Editors." In the same vain, there are simulation conference proceedings consisting of well over 1000 pages with over 300 articles, in which case the average length of a paper is about three pages, with some articles consisting of only one or two pages.

This year, the Board of Directors of the Winter Simulation Conference provided me a platform to implement some drastic changes to ensure and maintain a high level of quality standards:

- 1) Only full-length papers are accepted as submission for presentation.
- 2) All papers are fully refereed.
- 3) Only about half of the contributed papers are retained for presentation.
- 4) Highly qualified individuals are invited to cover the state-of-the-art of specific fields of system simulation. Each one of the fourteen authors provides in-depth coverage of these specific fields. The invited papers including the keynote speech by Prof. Maurice S. Elzas are collected in a specific volume titled "Simulation with Discrete Models: A State-of-the-Art View."
- 5) Each contributed paper has half an hour for presentation.
- 6) Each invited paper, tutorial, and panel session is scheduled for an hour and half to provide in-depth coverage of the specific subject matter.
- 7) The number of parallel sessions is limited to four. Every time slot includes a contributed paper session, a tutorial and/or a panel session, and one or two state-of-the-art session(s).

As Program Chairman and Editor, I wish to acknowledge the cooperation of the members of the WSC Board and the Conference Committee. My special thanks to Paul F. Roth, the General Chairman, and to Charles M. Shub, the Associate Program Chairman for their collaboration. The referees helped tremendously, especially under very tight time constraints. The authors and session chairpersons are to be thanked for their contributions. Both of the volumes associated with this conference are printed at the University of Ottawa. The cooperation of Mr. G. Bourdeau, Director of the Reprographic Services, is exemplary. My wife Füsün provided me the assistance which was indispensable not only in the coordination of a large volume of correspondence but also in the editing of the two volumes.

It has been a privilege and pleasure to serve as the Program Chairman and Editor of the 1980 Winter Simulation Conference. I hope that you will find the Conference a worthwhile experience and the two volumes valuable references.

I believe that there is always room for improvement and that your feedback will improve your conference for the next year. Please take your time to communicate your views to the members of the 1981 Conference Committee or to the members of the WSC Board.

Tuncer I. Ören

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Truman L. Olsen

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The Winter Simulation Conferences	iv
From the Program Chairman	v
Sponsoring Organizations	vi
Winter Simulation Conference Board of Directors	vii
Conference Committee/1980	viii
List of Referees	ix
Contributed Papers	1
Tutorials	313
Panel Sessions	371

Adam, Nabil
Aggarwal, Sudhir
Blom, Jeffrey A.
Bulger, William G.
Cavus, J., Stephen J.
Chase, Newell E.
Clark, Gordon M.
Clough, Donald
Costanza, Michael C.
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Sloan, Yvonne
Solomon, Martin
Solomon, Susan L.
Tull, Thomas D.
Whitmore, David C.
Zeigler, Bernard P.

DETAILED TABLE OF CONTENTS

CONTRIBUTED PAPERS

SESSION A1 — STATISTICAL TECHNIQUES

Selection Procedures Based on Proportion Parameters <i>P. D. Amer</i>	3
Stability Regions and Spectra of Discrete Third-Order Autoregressive Time-Series <i>R. Wiener and J. S. Dorrenbacher</i>	9

A2 — SIMULATION SOFTWARE

SIMPAS: A Simulation Language Based on PASCAL <i>R. M. Bryant</i>	25
The Mission Effectiveness Program: An Analyst's Viewpoint <i>W. H. Bortels</i>	41

A3 — TRANSPORTATION

Simulating the Impact of Changes in a Statewide Freight System <i>R. C. Bushnell, J. T. Low, E. S. Pearsall</i>	53
Corporate Modelling and Planning Politics at Conrail <i>R. H. Mehl</i>	61
A Marketing Approach Utilized in the Designing of a Computer Model of a Rail Passenger Transportation Network <i>N. Chiesl</i>	73

A4 — FORMALISMS FOR MODELLING

Discrete Event Simulation of Stochastic and Deterministic Sequential Machine Models <i>M. M. Cutler</i>	83
A Fuzzy Sets Based Linguistic Approach: Theory and Applications <i>P. P. Bonissone</i>	99
Design of SEMA: A Software System for Computer- Assisted Modelling and Simulation of Sequential Machines <i>T. I. Ören and B. Collie</i>	113

SESSION A5 — BEHAVIORAL SYSTEMS

A Computer Simulation of the Effects of Variations in
Constitutive Rules and Individual Goals on Interpersonal
Communications

A. H. Brown, C. J. Campbell, E. E. Kaczka 127

Social Relations as Algebraic Relations

J. M. Cargal 139

A Multi-project Decision Process Simulation of Defense
Contractor Behavior (II)

D. L. Blakley, K. J. Cohen, A. Y. Lewin, R. C. Morey 155

A6 — FINANCIAL SYSTEMS

Corporate Forecasting with Probabilistic Financial
Statements

D. L. Chesser and P. K. Coats 165

A Simulation Language to Facilitate the Understanding
of Risk with an Illustration from Capital Budgeting

R. V. Oakford, A. Salazar, R. S. Skertchly 183

A7 — PRODUCTION PLANNING

Analysis of Bottling and Storage Operations at Brown
Forman Distillers Corporation

S. M. Alexander and G. R. Weckman 195

A Modular Approach to Simulation of Robotic Systems

*D. J. Medeiros, R. P. Sadowski, D. W. Starks,
B. S. Smith* 207

OB-GYN Configuration Simulator: A Planning Tool

D. Segal 215

A8 — ENERGY

A Decision-Rule Model for Bulk Terminal Management

D. Ketchum and D. L. Tweedy 223

Total Energy Plant — Simulation Model

R. D. Doering and Y. A. Hosni 235

A Simulation Model for Assessment of Large-Scale Power
System Reliability

J. H. Blackstone Jr., G. L. Hogg, A. D. Patton 241

SESSION A9 — NETWORK

User Perspective and Design Emphasis: Experience with a Network Model of the Food Processing System (ALINET) <i>E. R. Ducot and A. H. Levis</i>	255
A Pay-Per-Program Television Network Simulation Model <i>P. J. Kuzdrall, J. E. Hatch, R. A. More</i>	265
A High Level Simulation Model of a Networked Computer System <i>W. H. Hochstettler and L. L. Rose</i>	275
A10— POTPOURRI	
Deriving Empirical Equations from Simulation Results <i>L. J. Boelhouwer</i>	293
Manufacturing System Design Tool -MAST- An Introduction <i>J. E. Lenz</i>	299
Simulation of Structured Hardware Designs <i>C. M. Shub</i>	305

TUTORIALS

SESSION T1 — Fundamentals of Digital Simulation Modelling <i>J. W. Schmidt</i>	315
T2 — Simulation, Mathematical Modelling and Optimization in Industrial Design: When and how to apply it? <i>R. F. Garzia, P. H. Schmidt, M. R. Garzia</i>	325
T3 — SIMSCRIPT II.5 <i>E. C. Russell</i>	341
T4 — Introduction to GPSS <i>T. J. Schriber</i>	343
T5 — SLAM <i>C. D. Pegden and A. A. B. Pritsker</i>	347
T6 — Chapter G of the IMSL Library — Generation and Testing of Random Variates <i>P. A. W. Lewis</i>	357
T7 — Statistical Analysis of Simulation Output Data <i>A. M. Law</i>	361

PANELS

SESSION P1 — Interactive Graphics and Discrete Event Simulation Languages	Organizer: <i>J. Reitman</i>	373
P2 — New Vistas in Modelling Agricultural Systems	Organizer: <i>G. S. Hines</i>	375
P3 — Defense Management	Organizer: <i>T. D. Clark, Jr.</i>	379
P4 — Teaching Simulation	Organizer: <i>C. J. Bellas</i>	381

TUTORIALS

SESSION T1 — Fundamentals of Digital Simulation Modelling	<i>J. W. Schmidt</i>	383
T2 — Simulation, Mathematical Modelling and Optimization in Industrial Design: When and how to apply it?	<i>R. F. Garza, R. H. Schmidt, M. R. Garza</i>	385
T3 — SIMSCRIPT II.5	<i>E. C. Russell</i>	341
T4 — Introduction to GPSS	<i>T. J. Schriber</i>	343
T5 — SLAM	<i>C. D. Pegden and A. B. Pritsker</i>	347
T6 — Chapter 6 of the IMSL Library — Generation and Testing of Random Variables	<i>R. A. W. Lewis</i>	357
T7 — Statistical Analysis of Simulation Output Data	<i>A. M. Law</i>	361

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