Preface

The Proceedings of the 1980 National Computer Conference is the most comprehensive review of the current developments in the computing industry. This record of the 1980 NCC Program now becomes a part of the industry’s history, and stands as a tribute to Program Chairman Dr. Donald Medley and his committee. With the usability of the computer as an underlying theme of the program, Dr. Medley’s committee, the authors whose papers are included in this volume, and many others devoted considerable time and energy during the past year to assure that this program would be useful and informative to all attendees. They are to be commended for their efforts. Special recognition should be given, also, to the many panelists and speakers who participated in the 1980 NCC Program in a manner that went beyond the formal paper presentations included in these Proceedings. It is my sincere hope that you were able to attend some portion of the program at the 1980 NCC, and that this volume of the Proceedings will be a useful source of information for you for many years to come.

HERBERT B. SAFFORD
1980 NCC Chairman
A group of very bright and dedicated computing professionals have labored long and hard to develop a high quality technical program for the 1980 National Computer Conference that demonstrates the dynamics of the computing industry. These Proceedings represent the printed record of the result of over a year’s efforts of many, many individuals.

With the usability of the computing tool as the base, the 1980 NCC Program has been oriented to three audiences: the user, the technician and management. Program sessions have been developed for each of these communities within specific topic areas including: the architecture of software and hardware, communications, social impacts, data base management, management support, simulation modeling and image processing, applications considerations and general interest topics. In each of these areas the Program Committee has developed sessions that are educational in nature, sessions that are oriented to the technical details of the topic, sessions that address the management aspects of the topic and sessions for the user of that phase of technology.

A special feature of the 1980 NCC is a group of sessions dealing with the use of the computing tool in the entertainment industry. These sessions describe areas from the generation of music or art to the control of television and movie production. Additionally, in response to the ever growing interest in the use of computers by the non-professional, a special group of sessions will be presented under the banner of the 1980 NCC Personal Computing Festival, which will cover areas of interest in personal computing. A separate publication will include papers presented in this section of the program.

These Proceedings contain a printed record of the papers presented in the technical program. Summary statements for the many panel sessions were not included due to volume limitations; however, summary statements for each session are published in the conference attendance brochure. The individual area directors have prepared a general summary statement concerning selected groups of sessions and those summaries are in the Proceedings.

The planning and organization of the 1980 NCC Program required the dedicated efforts of many individuals: area directors, session organizers and leaders, panelists and presenters of technical papers, and referees who helped us select the papers to be presented in this volume. I wish to extend my sincere appreciation to all these individuals and, most especially, to the Program Committee. Without their efforts the 1980 NCC Program and these Proceedings would not have been a reality. It is our sincere hope that the program itself proves useful and enjoyable to all those who are able to attend the 1980 NCC and that the Proceedings provide a useful reference source for many years to come.
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