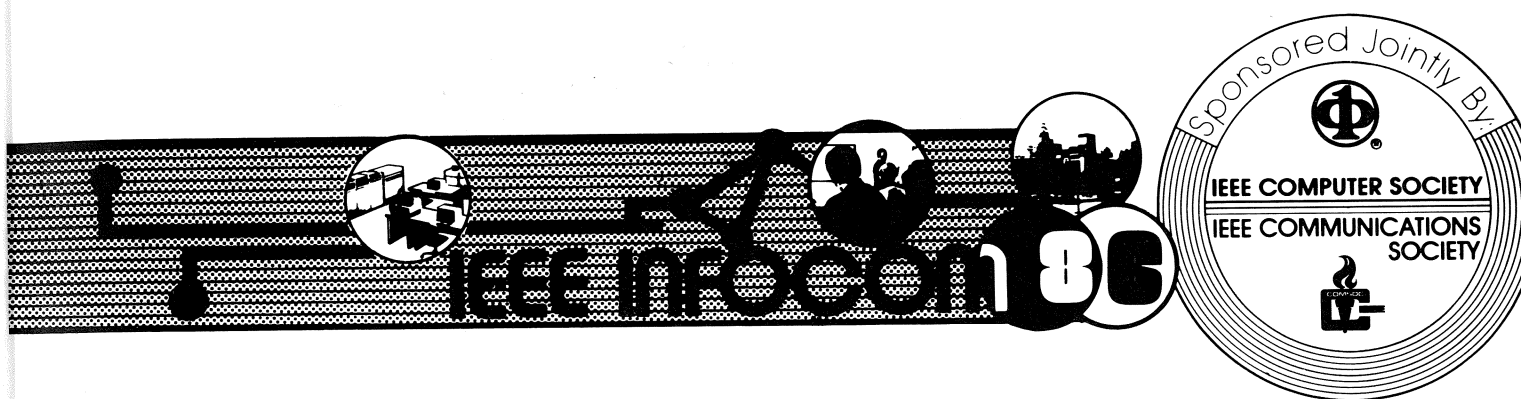


Proceedings

IEEE INFOCOM'86

Fifth Annual Conference

**“Computers and Communications Integration
Design, Analysis, Management”**



Technical Sessions: April 8-10, 1986

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General Chair: B.W. Stuck, Teltron, Inc.

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Sheraton Bal Harbour

Miami, Florida



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Message from the General Chairman



INFOCOM '86, The Fifth Annual Joint IEEE Computer and IEEE Communications Societies Conference, continues the tradition of the previous conferences in both form and function. The information sciences of computing and communications continue to mature, but interest is exploding: it can honestly be said that we are living in the midst of a revolution that will have a major impact well into the next century on the daily lives of many, many people throughout the world.

Our history has been that of technical excellence, and our technical program, assembled by Bezalel Gavish, is the strongest ever. The attraction of top researchers in academia, government, and industry to this event has always been its key to success. The intent is to foster interaction between theory and practice, to provide formal and not so formal communication channels for participants to interact with one another. Take advantage of the meeting rooms, the cocktail parties, and the beach to discuss issues of mutual interest—that is really what this is all about.

This year for the first time the General Chairman has been assisted by a Vice Chairman, Dr. Stuart Yuill, who most ably discharged his duties. This has been so successful that it will hopefully become a permanent fixture at future INFOCOMs.

The support of the IEEE Computer Society and IEEE Communications Society is most sincerely appreciated. I personally wish to thank all the members of the general program and technical program committees, the panelists, the reviewers, the session organizers, the tutorial organizers, the steering committee, the staff at the IEEE Communications Society and IEEE Computer Society, and all the others not known to me for all your time and effort in making this event a success.

A handwritten signature in cursive script that reads "Bart Stuck".

Bart Stuck
INFOCOM '86 General Chairman

Program Chairman's Message



Extensive developments took place this year both in digital communications and computing. The rapid decline in the real cost to end users of computing and communication services is a formidable force behind the expanding growth and use of digital communication services. Over the last year we have seen a flurry of offerings of new types of services and capabilities. The widespread acceptance and use of Local Area and Wide Area Networks raises many operational and management issues for the organizations which implement them. Those are reflected in the technical program.

After a plenary address by Dr. Vinton G. Cerf, who was the Technical Program Chairman of INFOCOM '82, the conference attendees will be able to participate in 30 sessions that have been clustered into 3 session tracks: Track A concentrates on Local Area Networks and covers Performance Modeling and Stability Considerations, Multiple Access Protocols and Medium Access Control Mechanisms, Ring Based Local Area Networks, Local Area Networks which support Multimedia Services and Mobile Radio Systems; the second track covers issues involved in the design, management and operation of Packet Switching Long Haul Networks and Local Access Networks. Those include: Network Interconnection Procedures, Local Access Network Design Algorithms, Backbone Network Design methods, Packet Network analysis, Network Operations and Management, Modeling and Protocols for Satellite Based Networks, and two panel sessions on Evolving Digital Data Networks and Packet Switching in the BOC Environment. Track C deals with Advances in Communications Protocols, Performance and Queuing Analysis of Networks, Networking Availability and Reliability, High Performance Packet Switching Networks, Distributed Computer Systems and Distributed Algorithms, and panel sessions on Networking Standards, Building Wiring for Communications and Recent Advances in Military Communications.

We were fortunate in having so many papers submitted for consideration, which allowed us to be highly selective in designing the final program. The conference proceedings contain a collection of papers which reflect the present state of the art in research and development. Panelists have been asked to provide position statements which are included in the proceedings; these should help in providing a stimulus for lively discussions during the panel sessions. In addition to the formal program, every attempt was made to encourage technical interchanges during the scheduled coffee and lunch breaks and the wine and cheese parties, and through short informal sessions which will take place during the evenings.

I am deeply indebted to the technical program committee members for their dedication and support, to the members of INFOCOM '86 organization; to Ms. Myra Slutsky for handling the proceedings assembly and printing process; and especially to my secretary, Ms. Nancy Bales for her tireless efforts in keeping me on schedule and handling the administrative tasks needed for an effective refereeing and review process, and for her responsiveness to the continuous changes in the schedule.

I hope you will enjoy the program assembled for you, and look forward to see you again at INFOCOM '87.

A handwritten signature in black ink, appearing to read "B. Cornish". The signature is written in a cursive style.

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