

- Proceedings of the 1973 ACM National Conference, Atlanta, USA*, pp. 136–141 (1973).
14. P. J. Courtois, F. Heymans and D. L. Parnas, Concurrent control with readers and writers. *Communications of the ACM* **12**, 667–668 (Oct. 1971).
 15. R. B. Keiburtz and A. Silberschatz, Capability managers. *IEEE Transactions on Software Engineering* **SE-4**, 467–477 (Nov. 1978).
 16. K. H. Kim, An implementation of the programmer transparent scheme for coordinating concurrent processes in recovery. *Proceedings of the Computer Software Applications Conference, Chicago, USA, 1980*, pp. 615–621 (1980).
 17. A. N. Habermann, *Path Expressions*. Technical Report, Carnegie-Mellon University (June 1975).
 18. P. Brinch-Hansen, Structured multiprogramming. *Communications of the ACM* **13**, 574–578 (July 1972).
 19. T. Anderson and J. C. Knight, *Practical Fault Tolerance for Real-time Systems*, ICASE Report 81-10. NASA-LRC (March 1981).
 20. K. Kant and A. Silberschatz, Error recovery in concurrent systems. *Proceedings of Computer Software Applications Conference, Chicago, USA, Oct. 1980*, pp. 608–614 (1980).
 21. B. Randell, P. A. Lee and P. C. Treleavan, Reliability issues in computing system design, *ACM Computing Surveys* **10** (2), 123–166 (June 1978).
 22. S. K. Shrivastava, Concurrent Pascal with backward error recovery. *Software Practice and Experience* **9**, 1001–1033 (Dec. 1979).

Conference

24–27 MARCH 1986

Artificial Intelligence '86, Singapore. AI and its Applications: A State of the Arts Review. For the first time in Singapore and South East Asia, a major international conference and exhibition will be held on this important and timely topic, at the Hyatt Regency Hotel, Singapore. This event is sponsored by the Singapore Science Council – as part of its efforts to actively promote public awareness of new and emerging technologies – together with other leading national organisations.

AI (the branch of computer science whereby computers can make inferences rather than just computations), is spawning its own industry. Currently enjoying a surge in interest and attention in developed countries like America, Japan and Europe, the awareness of AI is beginning to percolate down to developing nations such as South Korea, Taiwan and Singapore. It is envisaged that the field of AI will revolutionise the electronics, electro-mechanical and computer worlds in the years to come.

Among the 20 internationally renowned speakers in the field of AI who will be presenting papers at the conference are as *key-note speakers* Professors Edward Feigenbaum of Stanford University, Marvin Minsky of Massachusetts Institute of Technology and Raj Reddy of Carnegie-Mellon University. *Other prominent speakers include:* Dr Donald E. Walker, Bell Communications Research; Professors Reind van de Riet, Free University, Amsterdam; Hideo Aiso, Keio University, Tokyo; Robert Kowalski, Imperial College, London; Makoto Nagao, Kyoto University; G. M. Nijssen, University of Queensland, Brisbane; Luc Steels, Free University, Brussels; Tom Mitchell, Rutgers University; and Peter Chen, Louisiana State University; Dr Barbara Grosz, SRI International; Dr Daniel Bobrow, Xerox Palo Alto Research Center; Dr Kung Cheng Ho, Norwegian Institute of Technology, Trondheim; Dr Alex Pentland, SRI International; Dr Jonathan Slocum, MCC Corporation; Dr David Waltz, Thinking Machines Inc.; Dr Martin Ernst, Arthur D. Little Inc.;

Professor Randy Davis, Massachusetts Institute of Technology; Dr John Seely Brown, Xerox Palo Alto Research Center. (Other speakers to be confirmed.)

There will be tutorial sessions focusing on Principles of Deductive Database/Knowledge Representation, Programming in LISP, Programming in PROLOG, Principles of Heuristic Search and Intelligent Robotics. Conference Topics include Expert Systems, AI Techniques and Programming Languages, Natural Language Processing and Robotics. There will also be panel discussions.

An International Programme Committee comprising Drs Don Walker (Chairman), Bernard Tan, Singapore (co-Chairman), Reind van de Riet and Hideo Aiso (members) is responsible for structuring the programme.

Conference and Exhibition Management Services Pte Ltd (CEMS) is organizing the conference and North-Holland/Elsevier Science Publishers is the official publisher representing the journals *Artificial Intelligence*, *Data and Knowledge Engineering*, and *Future Generations Computer Systems*.

For further information please contact:
North-Holland, P.O. Box 1991, 1000 BZ Amsterdam, The Netherlands.

Announcements

EMPHASIS YEAR 1985–86.

Department of Mathematics, Statistics and Computer Science, The University of Illinois at Chicago.

Computers in Mathematical Research

Faculty and visitors will offer seminars and courses on topics including: Automated Reasoning, Algorithms of Nonlinear Optimization, Computation in Algebraic Geometry, Computation in Group Cohomology, Com-

putational Number Theory, Computation in Topology, Symbolic Algebra for Group Theory and Combinatorics.

Anticipated conferences include: Computers in Topology (January 1986), Computers in Geometry (March 1986). Funds for additional visitors and students may be available.

For further information, contact S. Smith, R. Larson, P. Wagreich, or M. Tangora, Department of Mathematics, Statistics and Computer Science, The University of Illinois at Chicago, Box 4348, Chicago, Illinois 60680 Telephone (312); 996-8616 or 996-3041. BITNET: UO9254 at UICVM. (ARPA gate via WISVM. BITNET).

North-Holland has recently published volume 1, issue 1 of DECISION SUPPORT SYSTEMS, a new journal aimed at facilitating research in this expanding field, both by monitoring ongoing research and by providing a forum for discussion.

DECISION SUPPORT SYSTEMS aims at bridging the gap between computer science and management science, which has characterized the field in the past. To ensure this, the journal draws from a range of disciplines, including operations research, management science, computer science, cognitive psychology and organizational behaviour, where these are relevant to theoretical issues in DSS.

DECISION SUPPORT SYSTEMS will serve as a forum for researchers and developers of DSS, researchers and practitioners in computer science, management and business administration, computer manufacturers, proprietary software developers and managers of industry, commerce and public administration.

A free copy of DECISION SUPPORT SYSTEMS can be obtained by writing to: North-Holland, A Division of Elsevier Science Publishers B.V., Attn: Karin van Schouten, P.O. Box 1991, 1000 BZ Amsterdam, The Netherlands.