THE FINITE STRING NEWSLETTER

CALLS FOR PAPERS

LOGIC AND COMPUTER SCIENCE WORKSHOP

9-14 June 1985
Lexington, Kentucky

The workshop will cover those areas of Computer Science where an active part is played by logic-inclined researchers, in particular:

- Theory of Computation
- Theory of Data Bases
- Artificial Intelligence
- Theory of Operating Systems (Temporal Logic)
- Program Verification
- Logic Programming

To date, the following have accepted invitations to speak: K. R. Apt (Paris VII – IBM), P. Clote (Boston College), R. Fagin (IBM, San Jose), T. Imielinski (Rutgers), H. Lewis (Harvard), V. Lifschitz (San Jose State), J. Minker (Maryland), R. Reiter (British Columbia), R. Smith (Florida), S. Szpakowciz (Kentucky), and M. Vardi (Stanford).

In addition to the invited speakers, there will be sessions for contributed papers. Those who wish to deliver a paper should send three copies of an extended abstract to the conference address (below) **before March 1.** Notification of acceptance will be mailed before April 10.

A grant from the National Science Foundation makes it possible to offer a number of stipends for participants. For further information, write to the address below. (Graduate students should include letters from their advisors.)

Logic and Computer Science
Department of Computer Science
University of Kentucky
Lexington, KY 40506-0027

Organizational Committee: Forbes Lewis, Wiktor Marek, Anil Nerode.

SECOND IEEE DATA ENGINEERING CONFERENCE

4-6 February 1986
Los Angeles, California

SCOPE

Data Engineering is concerned with the role of data and knowledge about data in the design, development, management, and utilization of information systems. As such, it encompasses traditional aspects of databases, knowledge bases, and data management in general. The purpose of this conference is to continue to provide a forum for the sharing of experience, practice, and theory of automated data and knowledge management from an engineering point-of-view. The effectiveness and productivity of future information systems will depend critically on improvements in their design, organization, and management.

We are actively soliciting industrial contributions. We believe that it is critically important to share practical experience. We look forwards to reports of experiments, evaluation, and problems in achieving the objectives of information systems. Papers which are identified as such will be processed, scheduled, and published in a distinct track.

TOPICS OF INTEREST

- Logical and physical database design
- Design of knowledge-based systems
- Data management methodologies
- Architectures for data- and knowledge-based systems
- Distribution of data and information
- Performance Evaluation
- Data engineering tools

We also are planning a special workshop track:

- Performance models and measurement of relational database systems

and solicit papers that report or evaluate such findings.

AWARDS, STUDENT PAPERS, AND SUBSEQUENT PUBLICATION

An award will be given for the best paper at the conference. Up to three awards of $500 each to help defray travel costs will be given for outstanding papers authored by students. Outstanding papers will be considered for publication in the IEEE Computer Magazine, the Transactions on Computers, and the Transactions on Software Engineering. For more information, contact the General Chairman.

CONFERENCE TIMETABLE

1 JULY 1985
Deadline for ***receipt*** of four copies of paper by
Second Data Engineering Conference
IEEE Computer Society
1109 Spring Street, Suite 300
Silver Spring MD 20910
(301 598-8142)

1 OCTOBER 1985 Acceptance letters sent.

15 NOVEMBER 1985 Camera-ready copy due.

3 FEBRUARY 1986 Tutorials

4-6 FEBRUARY 1986 Conference

PEOPLE

HONORARY CHAIRMAN
C. V. Ramamoorty
University of California
Berkeley, CA

GENERAL CHAIRMAN
P. Bruce Berra
Syracuse University
Syracuse, NY
[315] 423-4445

PROGRAM CHAIRMAN
Gio Wiederhold
Dept. of Computer Science
Stanford University
Stanford, CA 94305
[415] 497-0685
Wiederhold@sumex-aim.arpa

PROGRAM CO-CHAIRPERSONS
Iris Kameny
SDC
Santa Monica, CA 90406

Ming T. (Mike) Liu
Ohio State University
Columbus, OH 43210

Richard L. Shuey
Schenectady, NY 12309

Benjamin Wah
Purdue University
West Lafayette, IN 47907

INTERNATIONAL COORDINATION
Tadeo Ichikawa
Hiroshima University
Faculty of Engineering,
Shitami Saijo-Cho
Higashi-Hiroshima 724, Japan

Herbert Weber
Universitaet Dortmund
Fachbereich Informatik,
August Schmidt Strasse
4600 Dortmund, F.R.Germany

TUTORIALS
Peter Ng
University of Missouri
Columbia, MO

AWARDS
Ming T. (Mike) Liu
State University of Ohio
Columbus, OH

TREASURERS
Lily Chow
IEEE
Silver Spring, MD 20910

Aldo Castillo
TRW
Redondo Park, CA 90278

LOCAL ARRANGEMENTS
Walter Bond
Cal State University
1000 East Victoria Street
Dominquez Hills CA 90747
[213] 516-3580/3398

PUBLICITY
Mas Tsuchiya
TRW, Bldg.02/2361
One Space Park
Redondo Beach, CA 90278
[213]-536-8330

EPILOG

The correct design and implementation of data systems requires attention to principles from data bases, knowledge bases, software engineering, and *system* evaluation. We hope you will participate.

THEORETICAL ASPECTS OF REASONING ABOUT KNOWLEDGE

9-11 March 1986
Asilomer Conference Center, Monterey, CA

While traditionally research in the area of theoretical aspects of reasoning about knowledge was mainly done by philosophers, recently it has been shown to be of great relevance to computer science, especially in such areas as artificial intelligence, distributed systems, database systems, and cryptography. There has also been interest in the area among linguists and economists. The aim of this conference is to bring together researchers from these various disciplines with the intent of furthering our theoretical understanding of reasoning about knowledge.

Topics of interest include, but are not limited to:

- Semantic models for knowledge and belief
- Resource-bounded knowledge (appropriate for modelling reasoners with limited reasoning power and reasoning about cryptographic protocols)
- Using knowledge to specify and reason about distributed systems
- Semantic models of knowledge acquisition and learning
- Nonmonotonic reasoning

Please send 8 copies of a detailed abstract not exceeding 10 double-spaced typewritten pages in length (not a full paper), **by 15 September 1985,** to the program chair:

Dr. J. Halpern
IBM Research, K51/281
5600 Cottle Rd.
San Jose, CA 95193

The abstract should include a clear description of the problem being addressed, comparisons with extant work, and a section on major original contributions of this work. The abstract must provide sufficient detail for the program committee to make a decision. Papers will be chosen on the basis of scientific merit, originality, and appropriateness for this conference.

Authors will be notified of acceptance by **1 November 1985.** Accepted papers typed on special pages will be due at the above address **by 15 December 1985.**

We hope to allow enough time between the talks during the conference for private discussions and small

group meetings. In order to ensure that the conference remains relatively small, attendance will be limited to invited participants and authors of accepted papers. Support for the conference has been received from IBM and AAAI; an application for further support is pending at ONR.

PROGRAM COMMITTEE

M. Fischer, *Yale*
J. Halpern, *IBM San Jose*
H. Levesque, *University of Toronto*
R. Moore, *SRI*
R. Parikh, *CUNY/Brooklyn College*
R. Stalnaker, *Cornell*
R. Thomason, *University of Pittsburgh*
M. Vardi, *Stanford/CSLI*

FIRST INTERNATIONAL CONFERENCE
ON EXPERT DATABASE SYSTEMS

1-4 April 1986
Charleston, South Carolina

Sponsored by: Institute of Information Management, Technology, and Policy, College of Business Administration, University of South Carolina

In cooperation with: American Association for Artificial Intelligence; Associaton for Computing Machine – SIGMOD, SIGART, and SIGPLAN; IEEE Technical Committee on Data Base Engineering; Agence de l'Informatique, France

Conference General Chairman:
Donald A. Marchand, Director,
Institute of Information Management, Technology, and Policy

Tutorial Chairman: Jonathan King, Teknowledge, Inc.

Panel Coordinator: Arun Sen, Univ. of South Carolina

Conference Coordinator: Cathie L. Huges, IIMTP
(803) 777-5766

CONFERENCE OBJECTIVES:

The goal of this conference is to explore both the theoretical and practical issues of Expert Database Systems. These systems represent the ***confluence*** of R&D activities in Artificial Intelligence, Logic, and Database Management.

Expert Database Systems will play an ever-increasing role in scientific, governmental, and business applications by

- providing intelligent knowledge-based access to large shared data bases through novel user interfaces and natural-language question-answering facilities.
- endowing database systems with reasoning, planning, and justification capabilities.
- creating knowledge-base management bools and techniques to support the creation, manipulation, indexing, and evolution of large knowledge bases, and
- integrating AI and QB functional requirements into new hardware and software environments for the specification, prototyping, testing, and debugging of knowledge-based applications.

In order to foster the ***cross fertilization*** of ideas from AI, Logic, and Data Bases, the conference will be composed of tutorial sessions, paper sessions, and panel discussions.

TOPICS OF INTEREST

The Program Committee invites original papers (of approximately 5000 words) addressing (but not limited to) the following areas:

- **Theory of Knowledge Bases** (including knowledge representation, knowledge models, recursive data models, object-oriented models, knowledge indexing and transformation)
- **Knowledge Engineering** (including acquisition, maintenance, learning, knowledge-directed dtabase specification and design methodologies, case studies)
- **Knowledge Base Management** (including architectures and langauges, constraint and rule management, metadata management, extensible data dictionaries)
- **Reasoning on Large Data/Knowledge Bases** (including inexact and fuzzy reasoning, non-monotonic reasoning, deductive data bases, logic-based query languages, semantic query optimization, constraint-directed reasoning)
- **Natural Language Interactions** (including question-answering, extended responses, cooperative behavior, explanation and justification)
- **Intelligent Database Interfaces** (including expert system – database communication, knowledge gateways, knowledgeable user agents, browsers, videotex)
- **Knowledge-Based Environments** (including Decision Support Systems, CAD/CAM, VLSI design)
- Organizational Issues (including technology transfer, procurement of expert database sysems, knowledge administration, knowledge certification)

PAPER SUBMISSION

Please send five (5) copies of papers **by September 12, 1985** to

Larry Kerschberg, Program Chairman
College of Business Administration
University of South Carolina
Colubmia, SC 29208

Conference proceedings will be available at the conference and subsequently will appear in book form.

IMPORTANT DATES

Submission Deadline	12 September 1985
Acceptance Notification	25 November 1985
Final Version Due	10 January 1986
Conference	1-4 April 1986

EIGHTH EUROPEAN MEETING ON
CYBERNETICS AND SYSTEMS RESEARCH

1-4 April 1986
University of Vienna, Austria

Organized by Austrian Society for Cybernetic Studies

PLENARY LECTURES AND SYMPOSIA ON

- General System Methodology
- Cross-Disciplinary and Empirical Refinement of Isomorphies
- Designing and Systems
- Humanity, Architecture, and Conceptualisation
- Cybernetics in Biology and Medicine
- Cybernetics of Socio-economic Systems
- Computers in Health Care
- Fuzzy Sets – Meeting of the EURO Working Group
- Systems Engineering for Design Automation
- Communication, Computers, and Networking
- Methodological Improvements and New Applications of Expert Systems
- Knowledge-Based Natural Language Processing

In conjunction with this conference, a SPECIAL MEETING will be held on

- Future and Impacts of Artificial Intelligence

PAPER SUBMISSION

Send three copies of the full paper (up to eight A4 pages, single-spaced), in English. Submissions should include the selected symposium or special meeting. Papers must be **received not later than 1 October 1985.**

SUBMISSIONS/ENQUIRIES should be sent to the Chairman:

Robert Trappl
Department of Medical Cybernetics
and Artificial Intelligence
University of Vienna
Freyung 6/2
A-1010 Vienna AUSTRIA

CANADIAN ARTIFICIAL INTELLIGENCE CONFERENCE
(CSCSI-86)

21-23 May 1986
Montreal, Canada
Sponsored by Canadian Society for Computational Studies of Intelligence

The Sixth National Conference of the CSCSI invites submission of theoretical and applied research papers in all areas of Artificial Intelligence research, particularly:

- Knowledge Representation
- Computer Vision
- Natural Language Understanding
- Expert Systems and Applications
- Logic Programming and Formal Reasoning
- Robotics
- Planning, Problem Solving and Learning
- Cognitive Science
- Social Aspects of AI
- AI Architecture, Languages and Tools

All submissions will be fully refereed by the program committee. Authors are requested to prepare full papers of no more than 5000 words in length and specify in which area they wish their papers reviewed. All papers should contain concise clear descriptions of significant contributions to Artificial Intelligence research with proper references to the relevant literature. Figures and illustrations should be professionally drawn.

Three copies of each submitted paper must be in the hands of the Program Chairman **by December 31, 1985.** Electronic submissions are unfortunately not acceptable. All accepted papers will be published in the conference proceedings.

Correspondence should be addressed to either the General Chair or the Program Chair, as appropriate.

GENERAL CHAIR
Renato De Mori
Department of Computer Science
Concordia University
Montreal, P.Q. H3G 1M8
CANADA

PROGRAM CHAIR
Bill Havens
Department of Computer Science
University of British Columbia
Vancouver, B.C. V6T 1W5
CANADA
Network Address: havens@ubc.CSNET

COLING 86

THE XIth INTERNATIONAL CONFERENCE
ON COMPUTATIONAL LINGUISTICS

25-29 August 1986
University of Bonn (West Germany)

NATIONAL ORGANIZING COMMITTEE
István S. Bátori, *Koblenz*
Peter Hoschka, *Bonn*
Jürgen Krause, *Regensburg*
Rainer Kuhlen, *Konstanz*
Winfried Lenders, *Bonn*
Christian Rohrer, *Stuttgart*
Helmut Schnelle, *Bochum* (Chairman)
Wolfgang Wahlster, *Saarbrücken*

TOPICS: computational linguistics in general, syntax, parsing, language generation, semantics, phonological and morphosyntactical analysis, speech analysis and synthesis, discourse analysis, machine translation, machine-aided translation, representation of knowledge, computational models of understanding, linguistic theoriesand computational models, software tools and programming languages for computational linguistics, hardware for natural language processing, dictionaries, lexical data bases.

Authors wishing to present a contribution should submit five copies of draft of their paper (maximum

8000 words), double-spaced, **by 1 December 1985,** to the Chairman of the Program Committee:

Prof. Makoto Nagao (Kyoto)
Dept. of Electrical Engineering
Kyoto University
Sakyo-ku, Kyoto, 606, Japan

The Program Committee will respond before **15 March 1986.**

The complete text of the revised papers in camera-ready form should be sent before **1 May 1986** to

Winfried Lenders
Institut für Kommunikationsforschung und Phonetik
der Universität Bonn
Poppelsdorfer Allee 47
D-5300 Bonn 1

PROGRAMS

ACL EUROPEAN CHAPTER: SECOND CONFERENCE

28 MARCH 1985

MORNING

Opening Session: Invited Speaker

Kornai – **Natural languages and the Chomsky hierarchy**
Hess – **How does Natural Language Quantify**
Stirling – **Distributives, quantifiers, and a multiplicity of events**
Slocum and Bennett – **An evaluation of METAL**
Root – **A two-way approach to structural transfer in MT**
Boitet et al. – **Various representations of texts for EUROTRA**

AFTERNOON

Descles – **Predication and topicalisation: a formal study in the framework of applicative languages**
Bainbridge – **Montagovian definite clause grammar**
Des Tombe et al. – **Specification of time in natural language**
Fum – **Natural language processing and the automatic acquisition of language**
Wilks – **Right attachment and preference semantics**
Dunin– **Keplica – How to restrict ambiguity of discourse**
Haugeneder – **An ATN treatment of WH-movement**
Popowich – **SAUMER: Sentence analysis using METArules**
Ramsay – **A self improving parser for generalised phrase structure grammars**
Lehtola – **A language based environment for natural language parsing**
Bestougeff, Ligozat – **Parametrised abstract objects for linguistic information processing**
Salton – **On the representation of query term relations by soft Boolean operators**

29 MARCH

MORNING

Altman – **The resolution of local syntactic ambuiguity by the human sentence processing mechanism**
Pulman – **A parser that doesn't**
Delmonte – **Parsing difficulties and phonological processing in Italian**
Izumida et al. – **A natural language interface using a world model**
Berry-Rogghe – **Interpreting singular definite descriptions in database queries**
Bree, Smit – **Non-standard uses of if**
Wehrli – **Design and implementation of a lexical data base**
Maistros, Kotsanis – **Lexifamis: A lexical analyser of modern Greek**
Beale – **Grammatical analysis by computer of the Lancaster-Oslo/Bergen corpus**
Fimbel et al. – **Using a text model for analysis and generation**
Gillott – **The simulation of stress patterns in synthetic speech – a two level problem**
Johnston, Altman – **Automatic speech recognition: a framework for research**

AFTERNOON

Garside – **A probabilistic parser**
Boguraev, Briscoe – **Toward a dictionary support environment for real time parsing**
Koktova – **Towards a new type of morphemic analysis**
Fum et al. – **A rule based approach to evaluating importance in descriptive texts**
Patten – **A problem solving approach to generating text from systematic grammar**
Parisi, Giorgi – **GEMS: a model of sentence production**
McDonald, Pustejovskh – **SAMSON: A computational theory of prose style in generation**
Tait – **An English generator for a case-labelled dependency representation**
Muraki et al. – **Augmented dependency grammar**
Hajicova, Sgall – **Towards an automatic identification of topic and focus**
Morik – **User modelling, dialog structure, and dialog strategy in HAM-ANS**
Narin'Yani, Simonova – **Communicative context of dialogue interaction**
