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SIGMOD RECORD

A Quarterly Publication of the Association for Computing Machinery (ACM)
Special Interest Group on Management of Data (SIGMOD)

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CONTRIBUTIONS to the SIGMOD RECORD may be sent to the Editor. They should be camera-ready and typed single spaced. All papers printed herein are unrefereed working papers, unless otherwise noted.

MEMBERSHIP in SIGMOD (at $3 per year) is open to ACM members, associate members and student members; non-ACM members may belong to SIGMOD (at $11 per year) provided their major professional allegiance is in a field other than information processing or computing. Library subscriptions are available for $9 per year.

CHANGES OF ADDRESS, SUBSCRIPTION INQUIRIES and OTHER BUSINESS INQUIRIES should be directed to ACM SIGMOD, 1133 Avenue of the Americas, New York, New York 10036.

REGULAR BACK ISSUES of the SIGMOD RECORD (formerly FD) are available from ACM Headquarters for $2 per copy prepaid. SIGMOD WORKSHOP PROCEEDINGS are also available for different prices.

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Chairman's Column

The summer is almost over and the hordes of undergraduates are about to shatter the tranquility of Cory Hall. As usual, the summer went by too fast; I got done half of what I hoped to get accomplished; I am dreading the start of Fall quarter; the annual budget crunch is around the corner; the department has sent out its annual plea to keep phone costs down; my office is a mess and I have fifteen phone calls to return in the morning. With Silicon Valley offering our undergraduates a salary about equal to my 9 month University appointment, I am wondering why I hang out in this particular rat race.

The statistics are a little depressing: Computer Science PhD production at ALL American Universities is about 200 per year and falling slowly -- presumably because of industrial salaries to Master's degree holders has hit the low stratosphere. There are apparently 350 open positions for Computer Science Assistant Professors (no doubt paying about 20K) and a larger number of industrial openings (paying around 35K). You guessed it -- a backlog of at least 3 years.

Moreover, the Governor of my state and the state legislature in their infinite good judgement keep academic raises to 5 percent per year (except in Proposition 13 years when it is 0 percent). That plus merit increases has kept my personal salary increasing at 8 percent per year over the last 9 years. With industrial offers escalating much more rapidly and the inflation rate at its current level, all faculty members seem to be in the same situation I am, namely volunteering to take a pay cut in non inflated dollars for each year we continue to teach. At some point I suspect we will all quit or perhaps more probably turn into industrial consultants first and University Professors second.

I am guilty of my first awful gaffe -- I incorrectly stated that the Jerusalem data base conference next June was being organized by Peter Bunemann when the correct person is:

Peter Scheuermann
Computer Science Dept
Northwestern University
Evanston, Ill.
(312) 492-7141

I am sorry to have messed up.

In this issue of the RECORD there is a letter from Paul Abrahams, Chairman of the ACM SIG Board (the folks who oversee all SIGs including SIGMOD) on the matter of elections. In my column last time I explained that we wanted to hold
elections and have a new slate of officers in 1983. Moreover, the sense of the attendees at the business meeting (which we held during the SIGMOD annual conference) was to support this position. Paul and others at ACM were concerned that the people at the business meeting might not be representative of the membership at large. Hence, business meeting support should not necessarily indicate the support of the membership as a whole. As a result, he has taken the actions outlined in his letter. If you want to see elections held before the Spring of 1983, you should indicate so to Paul at the return address on his letter.

As many of you may know David Hsiao has resigned as Editor of TODS. I think David deserves a big "thank you" for conceiving TODS, getting it off the ground, and charting a good course through sometimes troubled waters for five years. Bob Taylor of IBM Research has been appointed by ACM to be his replacement. I am pleased that the reins are in such capable hands.

Rumors and Raw Data Department

First, yours truly just got promoted to Full Professor -- and I am now a full-fledged "gray beard". According to my spies the following people got tenure:

David Dewitt -- University of Wisconsin
Eric Clemons -- University of Pennsylvania
Peter Bunemann -- University of Pennsylvania

Umesh Dayal tossed in the towel at Texas and moved to CCA. Ed Lien has moved to Bell Labs at Murray Hill where he is a first line manager of a database group -- and of course he is recruiting. Irv Traiger is back at IBM Research after a tour of duty at Intergalactic IMS headquarters (IBM in Santa Teresa) -- and is groaning about having to be a manager again. Herb Weber has apparently moved from the Technical University in Berlin to Bremen.

Since there appears to be so much interest in where we hold our annual conference -- of course the solution has to be to set up a committee to take the burden off my shoulders. The 1982 conference is in Orlando, but no 1983 site has been chosen yet. I hereby foist that decision on the following committee:

Randy Katz
Computer Science Dept
University of Wisconsin

(cause he wrote such a nice letter to the editor last time)

Eric Wolman
Bell Labs
Holmdel, New Jersey

(cause he made a good comment at the SIGMOD business meeting)

Pat Selinger
(cause she's our intrepid vice chairperson and has to be chairman of all such committees)

Lastly, Ted Codd is the winner of the 1981 Turing Award. It is a great privilege to congratulate him on this honor, and I am delighted that the Computer Science community at large has chosen this mechanism to acknowledge his contribution to data base technology.

Michael Stonebraker
NOTES FROM THE VICE CHAIRPERSON

I would like to pass along a suggestion to future conference program chairpersons: There is a long delay between the time that a call for papers is sent and the time that potential contributors see the announcement. Often, we in SIGMOD receive earlier calls for papers by virtue of being in SIGMOD or by being on past address lists. But not all potential authors are so fortunate. It's very frustrating to see a call for papers in the ACM Communications for a conference to which one might have submitted a paper, only to see that the submission deadline is too close to get the paper into shape. This is especially true for ACM members who are not in the U.S. whose CACM's may take longer to arrive. So I urge you to get the announcements into CACM as quickly as possible in order to draw paper submissions from the widest possible audience.

I'm including a reminder of the various upcoming database and general conferences. For more details, see the ACM Communications.

CALLS FOR PAPERS


15 September 1981: Workshop on Statistical Database Management, San Francisco Bay Area, Calif., December 2-4, 1981. Sponsor: Lawrence Berkeley Laboratory with cooperation of ACM SIGMOD and ASA Statistical Computing Section. See June Communications. 4c. of paper (5000 words or less) with extended abstract or extended abstract only (500 words) to: Harry K.T. Wong, Computer Science and Mathematics Dept., 50B-3238, Lawrence Berkeley Laboratory, Univ. of California, Berkeley, CA 94720. Notifications by Nov. 1, 1981. Proceedings.

CALENDAR OF CONFERENCES

September 10, 1981: ACM North Central Regional Conference, St. Louis, Mo. Sponsors: ACM North Central Region and St. Louis Chapter. Conf. chm: Gerald W. Oursler, Box 7246A, St. Louis, MO 63177; (314)233-1918.

September 9-11, 1981: Seventh International Conference on Very Large Data Bases, Cannes, France. Sponsors: ACM SIGBDP, SIGIR, and SIGMOD, INDRIA, IEEE-CS. Contact: INRIA Public Relations Department, B.P. 105-78150 Le Chesnay, France.

September 14-16, 1981: Fifth Annual Data Entry Management Conference, Las Vegas, Nev. Contact: Marilyn S. Bodek, DEMA, Box 3231, Stamford, CT 06905; (203)322-1166.

Oct. 2-3, 1981: ACM Mountain Regional Conference, Calgary, Alberta, Canada. Sponsors: ACM Mountain Region and Alberta Chapter in cooperation with CIPS, Faculty of Continuing Education. Conf. co-chm: Peter Newsted, Faculty Management, University of Calgary, Calgary, Alberta, Canada TN2 IN4; (403)284-7156.


Pat Selinger
IBM Research Lab K55/282
5600 Cottle Rd.
San Jose, CA 95193
In Memory of Kevin Whitney

I was saddened to learn of the unexpected death of Kevin Whitney in April of this year. Kevin received his PhD from the University of Michigan in 1970, working with Prof. Keki Irani. In fact, he shared an office next door to mine and we became close friends. Following a nine month world tour, he became a member of the technical staff at General Motors Research Institute. There he was largely responsible for the design and implementation of RDMS [1], one of the very early relational prototypes. Kevin will be remembered as one of the "seconds" for Ted Codd in the great debate at the 1974 SIGMOD annual conference and wrote an interesting article for the National Computer Conference in 1973 [2]. In 1976 he decided to return to school and earned an MBA from Harvard Business School. Thereafter, he joined Computer Corporation of America as the Director of Marketing for their 204 database product. At the time of his death, he was member of the Arthur D. Little technical staff and did a variety of data base oriented consulting. He is survived by his wife Ruth, to whom we all express our deepest sympathy.

Michael Stonebraker


July 22, 1981

Professor Michael Stonebraker  
M265 Cory Hall  
University of California  
Berkeley CA 94720

Dear Michael:

I am writing to you about the problem of the missing election for SIGMOD officers. As you know, ACM Bylaw 7 requires that SIG elections be held in July of odd-numbered years, e.g., 1981; it further states that SIG officers serve for two-year terms. You have explained to me and a number of other people in ACM that you are unwilling to hold an election in 1981 because you have been in office for less than a year, and it would be unfair to you and the other officers to force an election when you have barely had a chance to get started. I also realize that the election was delayed by circumstances over which you had no control.

In order to end this impasse I hereby declare the offices of the entire SIGMOD Executive Committee to be vacant; and using my authority as Chairman of the SIG Board I am filling these vacancies by appointing you and the other Executive Committee members to your previous posts. These appointments will all expire on June 30, 1983.

Because the SIGMOD membership will not have an opportunity to select their officers this year, it is important that they know what has happened. Should there be any significant protest from the membership over the skipped election, I will have to take further action, which could mean removing the entire set of officers.

-8-
I would appreciate it if you would publish this letter in the SIGMOD Newsletter, and also notify the other officers of my action. Any SIGMOD members who are dissatisfied with my action should write to me directly.

Sincerely,

Paul W. Abrahams

cc: SIG Board
ACM Executive Committee
ACM HQ Distribution
(all via Aronson)
PROPOSALS SOUGHT FOR SIGMOD REGIONAL
CONFERENCES OR WORKSHOPS

Interested groups or individuals are invited to submit proposals for regional workshops or conferences which will:

- Further the aims and goals of SIGMOD.
- Introduce SIGMOD to a broader group.
- Experiment with innovative formats, subjects, and programs for possible use in larger conferences.
- Provide conference/workshop benefits to regions and individuals who might not otherwise be able to attend.
- Cooperate with other SIG's or professional groups in ways not possible or difficult at the national level.

SIGMOD will help with up to $1000 in "seed money," professional support, introduction to conference-experienced colleagues in designated areas, assistance with publications, etc.

Proposals should contain:

- Definition of region to be served.
- Goals of the proposed program.
- Key personnel arranging the program with some biographical data and/or group sponsoring proposal.
- Projected dates/milestones to accomplish intent.
- Other meetings in the region or national meetings with similar themes within three months of the regional meeting.
- Financial plan with estimate of "seed money" required and reasonable likelihood of returning the "seed money."

Proposals for the period January, 1982, through December, 1982, should be submitted before December 15, 1981.

Five copies of the proposal should be submitted to:

John L. Berg
SIGMOD Regional Workshop Coordinator
2541 Kingston
Northbrook, Illinois 60062

Proposals will be acknowledged and reviewed by members of a special Board. Proposers will be notified within 90 days of the acceptance of their proposals.
MEMO TO: Michael Stonebraker, SIGMOD Chairman
Lou Floria, ACM
Stanley Su, ACM-SIGMOD 1982 Conference Chairman

FROM: Toby J. Teorey and Y. Edmund Lien
ACM-SIGMOD 1981 Conference Chairman & Program Chairman

SUBJECT: ACM-SIGMOD 1981 Conference Summary

The ACM-SIGMOD 1981 International Conference on Management of Data was held April 29-30 and May 1, 1981 in Ann Arbor, Michigan. The Conference sessions were held in the Graduate School of Business Administration, University of Michigan. There were a total of 258 attendees, of which 207 were from the U.S., 31 from Canada, and 20 from ten other countries in Europe, the Near East, and Asia. The total conference income was $23,273.00 while expenses were $18,095.55, giving a net income of $5177.45.

The Conference featured nine parallel sessions, with a paper and panel session held simultaneously in each time period. One panel session was canceled due to the inability of the panelists (from Japan and People's Republic of China) to obtain travel funds. Twenty-four of the 25 paper authors were able to make their presentations.

Comments from the attendees indicated that they were happy with the quality of the program. In general, the attendance was evenly split between papers and panels, with the exception that the panel on Commercial Database Machines had approximately 160 people and the panel on Database Administration had about 35 people attending.
The most favorable comments were given with regard to the Hale Auditorium facilities (capacity: 400) for the paper sessions - comfortable, well-lighted, good acoustically, and roomy; the banquet talk given by Arthur Burks; ease of registration; and adequate supply of extra proceedings; and a constant supply of coffee and snacks during each day's events.

Some problems were presented by one the hotels overbooking customers and sending them to other hotels, and failure by the bus drivers to make all pre-arranged stops, requiring extra trips and some late arrivals to morning sessions. Another problem was the arrival of official programs one day late (April 29-afternoon) and the panel descriptions two days late, necessitating a last minute extra xerox job so attendees would have all their material on time. Also a number of the panels were put in the form of long presentations, leaving little or no time for audience participation and questions. It was proposed that we allow 1/3 to 1/2 of allotted panel time for audience participation.
EMPLOYMENT REGISTER
ACM Computer Science Conference
Convention Center — Indianapolis, Indiana
February 8-11, 1982

DESCRIPTION OF REGISTER

The Tenth Annual Computer Science Employment Register will be conducted at the Indianapolis Computer Science Conference. This Register, the only one of its kind, aids in matching computer scientists and data processing specialists with employer opportunities. Previous Registers have attracted thousands of applicants (experienced individuals and new graduates) and employers (business, industry, government, and academic institutions) with listings distributed as follows: Eastern States 33%, Central States 36%, Western States 28%, and Foreign 3%. These listings have received wide exposure. In addition to being reviewed by conference attendees, after each conference many copies of the register books have been placed on display in libraries, computer science departments, College and University Placement Offices, and other convenient locations.

The purpose of the Register is to provide a mechanism for establishing contact between applicant and employer in a professional manner. The Register operates as follows: the applicant completes a form giving identifying information, education, publications, experience, interests, references, position and salary desired. The employer completes a similar form giving: identifying information; position available along with starting date, salary, and benefits; and education, experience, and specialization requirements for the position. This information enables applicant and employer to determine the desirability for follow up.

In Indianapolis the applicant will have the opportunity to contact many employers at the Register in a short period of time. Likewise, an employer may contact experienced applicants and student applicants from many colleges and universities.

INTERVIEWING

The Employment Register staff will operate a message desk and maintain employer sign-up sheets at the Conference to facilitate making contacts. Actual arrangements for interviews will be the responsibility of the employer and the applicant. Employers may reserve an interview table.

REGISTER HOURS

The Register will be in operation in the Convention Center during the following hours:

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>Monday</td>
<td>February 8</td>
<td>6:00 pm - 9:00 pm</td>
</tr>
<tr>
<td>Tuesday</td>
<td>February 9</td>
<td>10:00 am - 8:00 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>February 10</td>
<td>10:00 am - 8:00 pm</td>
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<tr>
<td>Thursday</td>
<td>February 11</td>
<td>11:00 am - 3:00 pm</td>
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(over)
LISTING IN REGISTER

Both applicants and employers must file their registration on official forms. Three different forms will be used: (1) applicant, (2) academic employer, and (3) business, industry, and government employer. These forms may be obtained from and completed forms returned to:

Orrin E. Taulbee
ACM Computer Science Employment Register
Department of Computer Science
University of Pittsburgh
Pittsburgh, Pennsylvania 15260

Your request should specify which of the three forms is desired. Employers should request one form for each type of position available (only one form is needed in the case of several identical positions). Employers may use this opportunity to list summer or temporary positions. A typewriter must be used in completing forms since they will be reproduced exactly as submitted. Photocopies will not be accepted. There is no provision for handling attachments to the form.

REGISTER BOOKS

The completed forms will be compiled to form four books of listings: student applicant, experienced applicant, academic employer, and business, industry, and government employer. Multiple copies of these books will be available at the Conference for review. Personal copies of books (not including late listings) will be available for pick up at the Conference if ordered and paid for prior to January 8, 1982. There is no provision for mailing unclaimed books; those not claimed will be destroyed. Copies of books will be available at cost after the Conference.

CLOSING DATE

Closing date for acceptance of forms is January 8, 1982. Subject to ability of staff to handle, late listings will be accepted; however, their inclusion cannot be guaranteed.

CHARGES

Charges for the services offered by the Employment Register are indicated in the attached service order form. This form should be used for participation in the Register.

EMPLOYMENT REGISTER STAFF CANNOT ASSUME RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS, TIMELINESS, OR GOOD FAITH SHOWN IN THE APPLICANT OR EMPLOYER LISTINGS.
SECOND INTERNATIONAL CONFERENCE ON DATABASES: IMPROVING USABILITY AND RESPONSIVENESS

Sponsored by the Hebrew University of Jerusalem and Northwestern University in cooperation with ACM-SIGMOD

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Jeffrey Ullman, Stanford University, U.S.A.
Clement Yu, University of Illinois, Chicago Circle, U.S.A.
Carlo Zaniolo, Bell Laboratories, U.S.A.

HOW TO SUBMIT PAPERS
• Send five copies of the paper (up to 5000 words) to the Program Chairman by November 1, 1981
• Authors will be notified of acceptance by January 15, 1982
• Final version due February 15, 1982

TOPICS OF INTEREST As the theme implies, the emphasis of this conference is on database systems capabilities and functions from the user's point of view and on application areas which increase the scope of database systems usability. We seek research oriented papers with a practical orientation; however, theoretical papers which provide practical insight are also welcome. We solicit papers on topics which include (but are not limited to) the following subjects:

- Data Semantics and Conceptual Modeling
- Logical & Physical Database Design
- Distributed Databases Systems
- Databases and Program Conversion
- Query Languages and Query Optimization
- Concurrency, Security, Reliability
- User Interfaces and Human Factors
- Office Information Systems
- Metadata and Data Dictionaries
- Graphics and Databases
- Database Enhancements for Software Development

FORMAT The program will include about 20 formal papers, and there will be no parallel sessions. The last half day of the meeting will be devoted to small group discussions on specific topics, each under the direction of a moderator. Participants will be able to choose one of these discussion groups at registration.

PROCEEDINGS will be published in hardcover book form by Academic Press, New York. Authors of all accepted papers will be expected to sign a copyright release form and to adhere strictly to the schedule in order to guarantee availability of the book at the conference.