Report from the Program Committee



Hozumi Tanaka Program Chairperson Tokyo Institute of Technology

On behalf of FGCS 1992 program committee, I would like to express my deep thanks for all of you. I am very glad to meet you here. It's my great privilege to report to you on the background of the program of this conference.

Just ten years ago, FGCS project was launched with the support of the Japanese government. As soon as the FGCS project was announced, it had a profouned effect not only in computer scientists but also computer industries. The FGCS project was initially planned as a tenyear project, and this final 4th FGCS conference, therefore, has a historical meaning. I would like to give you a brief sketch of three conference,

The plenary session is composed of three invited lectures and a panel discussion along with general report on ICOT research and development. Here is the schedule of titles and speakers of the invited lectures (Fig. 1).

On Monday, Director Dines Bjørner will talk

Monday	June 1	13:30-14:30	Algorithmic & Knowledge Based Methods Do They "Unify?" —With Some Programme Remarks for UNU/IIST—
			Dines Bjørner Director International Institute for Software Technology The United Nations University, Macau
Tuesday	, June 2	9:00-10:00	The Role of Logic in Computer Science and Artificial Intelligence
			J.A.Robinson Professor, Syracuse University, U.S.A.
Friday,	lune 5	14:00-15:00	Programs are Predicates
			C.A.R.Hoare Professor, Oxford University, U.K.

Fig. 1 Invited Lectures

on "Algorithmic and Knowledge Based Methods. Do They Unify?" On Tuesday, Professor Robinson will talk on "The Role of Logic in Comuper Science and Artificial Intelligence". And on Friday, Professor Hoare will talk on "Programs are Predicates".

On Friday, we have a plenary panel discussion (Fig. 2). The title is "A Springboard for Information Processing in the 21st Century", which will be chaired by Professor Kowalski. Panelists include Dr. Gallaire, Dr. Overbeek, Dr. Wegner, Dr. Furukawa, and Dr. Uchida. In the plenary session, general reports on ICOT research and development will be planned. In addition to these, in technical session, which will start from June 3 and end with June 5, we will have an ICOT session where the logic and knowledge based approach and parallel processing will be emphasized through concrete discussions. Furthermore, many demonstration programs have been prepared at the conference sites; the participants are invited to visit and discuss these exhibitions. Through the ICOT session and exhibitions the participants will understand and receive a solid image of FGCS.

I would like to show you the organization of the program committee. The member of the program committee in total is sixty-four, where twenty-three members are from outside of Japan. To give you some ideas of how the program of the technical session was planned, I will tell you that we started out by dividing the session into four subsessions, namely, Foundations, Architectures and Software, Applications and Social Impacts, and ICOT sessions. The four subsessions work in parallel in three days. The technical session contains three invited papers, a technical panel discussion, and 82 technical papers which were selected from 256 submitted papers.

This slide shows a list of invited papers (Fig. 3). On Wednesday, Professor Dally will talk on "A Universal Parallel Computer Architecture". On Thursday, Professor Reiter will talk on "Formalizing Database Evolution in the Situated Calculus". On Friday, Professor Bratko will talk on "Applications of Machine Learning: Toward Knowledge Synthesis". In addition to three invited papers, a technical panel is prepared (Fig. 4). On Wednesday, Professor Mizoguchi will chair the panel; the title is "Future Direction of Next Generation Applications".

This slide (Fig. 5) shows what kind of papers from what countries were submitted to this conference. Three subsessions are balanced.

This slide (Fig. 6) is the result of the paper accepted. As mentioned before, out of 256 technical papers submitted, only 82 papers were selected by the program committee after careful and long discussions. The papers were judged in terms of relevance and originality. Actually, the selections were very very difficult tasks because of many excellent papers.

It is our hope that the conference program will prove to be both worthwhile and enjoyable for all participants.

Friday, June 5 15:30-18:00

Title: A Springboard for Information Processing in the 21st Century

Chairperson: Robert A.Kowalski

Professor, Imperial College, U.K.

Panelists: Hervé Gallaire G.S.I., France

Ross Overbeek Argonne National Laboratory, U.S.A. Peter Wegner Professor, Brown University, U.S.A.

Koichi Furukawa ICOT, Japan

Shunichi Uchida ICOT, Japan

Fig. 2 Plenary Panel Discussion

Wednesday, June 3 11:30-12:30 A Universal Parallel Computer Architecture William J.Dally Professor, MIT, U.S.A. Thursday, June 4 11:30-12:30 Formalizing Database Evolution in the Situation Calculus Raymond Reiter Professor, University of Toronto, Canada Applications of Machine Learning: Friday, June 5 11:30-12:30 Towards Knowledge Synthesis Ivan Bratko Professor Ljubljana University and Josef Stefan Institute Slovenia

Fig. 3 Invited Papers

Wednesday, June 3 16:00-18:00

Title: Future Direction of Next Generation Applications

Chairperson: Fumio Mizoguchi

Professor, Science Univ. of Tokyo, Japan

Panelists: Ronald J.Brachman AT&T Bell Labs., U.S.A.

Catherine Lassez IBM T.J.Watson, U.S.A.

Stephen Muggleton Turning Institute, U.K.

Kazuo Taki ICOT, Japan

Fig. 4 Technical Panel Discussion (Application)

I would like to announce several related events. Five workshops will be held just after this conference. Every participant of this conference is welcome to attend the workshops.

As a program chairperson it is my great pleasure to acknowledge the support of a number of people. First of all, I would like to give my sincere thanks to the program committee members who put a lot of efforts into making the program attractive.

I owe much to the three program vice chairpersons: Professor Makoto Amamiya, Dr. Shigeki Goto, and Professor Fumio Mizoguchi. Many ICOT members including Dr. Kazunori Ueda, Dr. Ken Satoh, Dr. Keiji Hirata, and Dr. Hideki Yasukawa have worked as key persons to plan and organize the program. Dr. Koichi Furukawa, in particular, has played an indispensable role in overcoming many problems. I would also like to thank many referees from many countries who replied quickly to the referee's sheets.

Finally, I would like to thank the secretary at ICOT; they made fantastic efforts to carry out the administrative tasks efficiently.

Thank you very much.

Countries	Number of Papers	Program Areas		
Countries		Foundations	Architectures	Applications
Japan	67	34	13	20
U.S.A	31	3	18	10
Germany	20	7	3	10
United Kingdom	. 19	7	7	5
Italy	17	9	5	3
France	16	4	1	11
Sweden	13	4	3	6
China	13	4	6	3
Canada	9	3	0	6
Austria	5	1	4	0
Belgium	5	4	1	0
C.I.S.	5	. 2	0	. 3
Korea	4	3	1	0
Australia	3	0	3	0
Spain	3	1	2	0
Israel	3	1	1	1
Others	23	8	4	11
TOTAL	256	95	72	89

Fig. 5 FGCS'92 Submitted Papers

Countries	Number of Papers	Program Areas		
Countries		Foundations	Architectures	Applications
Japan	30	12	7	. 11
U.S.A	10	0	7	3
Italy	7	5	1	1
United Kingdom	6	2	2	2
Canada	6	2	0	4
France	4	1	1	2
Sweden	4	2	2	0
Germany	3 -	. 2	0	1
Belgium	3	3	0	0
Korea	2	1	1	0
Portugal	1 .	. 1	. , 0	0
Thailand	1	1	0	0
Mexico	1	0	.0	. 1
Israel	1	. 0	0	1
Australia	1	0	1	0
Austria	. 1	0	1	0
Spain	1	0	1	0
TOTAL	82	32	24	. 26

Fig. 6 FGCS'92 Accepted Papers