The 1993 International Logic Programming Symposium

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The 1993 International Logic Programming Symposium was held in Vancouver, British Columbia, on 26–29 October. It presented the state of the art in logic programming, emphasizing the deliberate interaction with other fields, in particular, humanistic fields. Topics covered at the symposium included algorithmic analysis, programming methodologies, semantic analysis, deductive databases, and programming language design.

The idea of describing knowledge as horn-clause axioms whose automatically deduced consequences can provide solutions to problems in a particular knowledge domain materialized as logic programming around 1972, springing from the work of three marvelous pioneers: Alan Robinson, Alain Colmerauer, and Robert Kowalski. The years of unrelenting development by these pioneers and other wonderful people have brought the field to a stage of maturity that makes more deliberate interactions with other fields possible and desirable and that gives us enough perspective to consider our field from wider viewpoints, such as the philosophical.

The 1993 International Logic Programming Symposium, held in Vancouver, British Columbia, on 26–29 October, presented the state of the art in logic programming and also emphasized these other viewpoints. Margaret Boden, distinguished philosopher and psychologist from the University of Sussex (United Kingdom), challenged us with her keynote speech, “Logic and Creativity.” Inspiring invited lectures were given by Krzysztof R. Apt (University of Amsterdam, The Netherlands) on declarative programming in Prolog and Gail Kaiser (Columbia University) on rule-based approaches to software processes.

The tutorial sessions explored important and current themes: Hassan Ait-Kaci (Digital Equipment Corporation, Paris, France) introduced the LIFE system for programming with logic, inheritance, functions, and equations; Saumya Debray (University of Arizona) discussed compilers and static analysis; Melvin Fitting (Lehman College) surveyed metric methods in semantics of logic programs; and Luc De Raedt (Catholic University of Leuven, Belgium) presented an overview of inductive logic programming.

Thirty-two research contributions covered topics such as algorithmic analysis, constraints, programming methodologies, AI, proof theory, and programming language design.

University of Leuven, Belgium) presented an overview of inductive logic programming. Thirty-two research contributions selected from 145 submissions were presented at the symposium, which covered topics such as algorithmic analysis, constraints, programming methodologies, AI, concurrency and parallelism, logical extensions, metaprogramming and higher-order programming, semantic analysis, compilation techniques, deductive databases, implementations and architectures, proof theory, and programming language design.

The conference was followed by six workshops. One of them established a historic precedent: For the first time, the deductive database community was able to demonstrate its working systems at a meeting.

Attending the conference were 186 delegates, 145 of which attended the postconference workshops. The scientific program was complemented with an outdoor event (a fun run around Stanley Park in which 45 delegates participated) and a cultural event (the concert night “Music = Logic minus Control”).

Acknowledgments

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Veronica Dahl is internationally known for having pioneered the introduction of logic programming into the fields of databases, expert systems, and natural language front ends. She is also renowned for her extensive research on building logic-programming tools for processing language and on producing useful syntheses between linguistic theory and logic grammars. She is a full professor in the Computing Sciences Department and director of the Logic and Functional Programming Group at Simon Fraser University. She is one of the area editors for the Journal of Logic Programming and is an editorial board member for the journals Computational Intelligence and Expert Systems—Research and Applications. She recently won a Calouste Gulbenkian Professorship Award for Science and Technology.