

# Preface

These are the proceedings of the First International Conference on Computational Logic (CL 2000) which was held at Imperial College in London from 24th to 28th July, 2000. The theme of the conference covered all aspects of the theory, implementation, and application of computational logic, where computational logic is to be understood broadly as the use of logic in computer science. The conference was collocated with the following events:

- 6th International Conference on Rules and Objects in Databases (DOOD 2000)
- 10th International Workshop on Logic-based Program Synthesis and Transformation (LOPSTR 2000)
- 10th International Conference on Inductive Logic Programming (ILP 2000).

CL 2000 consisted of seven streams:

- Program Development (LOPSTR 2000)
- Logic Programming: Theory and Extensions
- Constraints
- Automated Deduction: Putting Theory into Practice
- Knowledge Representation and Non-monotonic Reasoning
- Database Systems (DOOD 2000)
- Logic Programming: Implementations and Applications.

The LOPSTR 2000 workshop constituted the program development stream and the DOOD 2000 conference constituted the database systems stream. Each stream had its own chair and program committee, which autonomously selected the papers in the area of the stream. Overall, 176 papers were submitted, of which 86 were selected to be presented at the conference and appear in these proceedings. The acceptance rate was uniform across the streams. In addition, LOPSTR 2000 accepted about 15 extended abstracts to be presented at the conference in the program development stream. (These do not appear in these proceedings.) CL 2000 also had eight invited speakers, 12 tutorial speakers, and seven workshops held in-line with the conference.

ILP 2000 was held as a separate conference with its own proceedings, but shared invited speakers and tutorial speakers with CL 2000.

The unusual structure of CL 2000 relied for its success on the cooperation of various subcommunities inside computational logic. We would like to warmly thank members of the automated deduction, constraints, database, knowledge representation, logic programming, and program development communities who contributed so much to the technical program. In particular, we would like to thank everyone who submitted a paper, the members of the stream program

committees, the other reviewers, the invited speakers, the tutorial speakers, the workshop organisers, and those who submitted papers to the workshops. Thanks to Vladimiro Sassone for allowing us to use his excellent software for electronic submission and reviewing of papers. We would also like to thank the members of the Executive Committee of the Association of Logic Programming for their support throughout the preparations for the conference.

May 2000

John Lloyd  
Veronica Dahl  
Ulrich Furbach  
Manfred Kerber  
Kung-Kiu Lau  
Catuscia Palamidessi  
Luís Moniz Pereira  
Yehoshua Sagiv  
Peter J. Stuckey

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### Logic Programming: Theory and Extensions

Catuscia Palamidessi (The Pennsylvania State University, USA)

### Constraints

Peter J. Stuckey (The University of Melbourne, Australia)

### Automated Deduction: Putting Theory into Practice

Ulrich Furbach (Universität Koblenz, Germany)

Manfred Kerber (The University of Birmingham, UK)

### Knowledge Representation and Non-monotonic Reasoning

Luís Moniz Pereira (Universidade Nova de Lisboa, Portugal)

### Database Systems (DOOD)

Yehoshua Sagiv (The Hebrew University of Jerusalem, Israel)

### Logic Programming: Implementations and Applications

Veronica Dahl (Simon Fraser University, Canada)

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## Reviewers

The following reviewers were in addition to the members of the Stream Program Committees.

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| Robert Colvin | Maurizio Proietti | Paul Tarau      |
| Bart Demoen   |                   |                 |

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|                     |                         |                     |
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|                     |                    |                   |
|---------------------|--------------------|-------------------|
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| Diego Calvanese     | Hiroyuki Kato      | Takeshi Sannomiya |
| Jan Chomicki        | Hiroko Kinutani    | Giuseppe Santucci |
| Giuseppe De Giacomo | Maurizio Lenzerini |                   |

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|                  |                 |                    |
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