

# Theory and Practice of Logic Programming



VOLUME 15 PART 6 NOVEMBER 2015

CAMBRIDGE  
UNIVERSITY PRESS

**EDITOR-IN-CHIEF**

**Ilkka Niemelä**  
 Aalto University School of Science  
 Department of Information and Computer Science  
 P.O. Box 15400, FI-00076 AALTO, FINLAND  
 EMAIL Ilkka.Niemela@aalto.fi

**FOUNDING EDITOR-IN-CHIEF**

**Jack Minker**  
 Department of Computer Science  
 and Institute for Advanced Computer Studies,  
 University of Maryland,  
 College Park, Maryland 20742, USA,  
 EMAIL minker@cs.umd.edu

**AREA EDITORS***Constraints*

**Peter J. Stuckey**  
 University of Melbourne  
 pjs@cs.mu.oz.au

*Inductive Logic Programming and Multi-relational Data Mining*

**Luc De Raedt**  
 Katholieke Universiteit Leuven  
 luc.deraedt@cs.kuleuven.be

*Specification, Analysis and Verification of Systems*

**Michael Leuschel**  
 University of Düsseldorf  
 leuschel@cs.uni-dusseldorf.de

*Databases and Semantic Web Reasoning*

**Thomas Eiter**  
 Vienna University of Technology  
 eiter@kr.tuwien.ac.at

*Knowledge Representation and Nonmonotonic Reasoning*

**Michael Gelfond**  
 Texas Tech. University  
 Michael.Gelfond@ttu.edu

*Theory*

**Michael Maher**  
 University of New South Wales  
 Michael.Maher@unsw.edu.au

*Design, Analysis and Implementation of Languages*

**Maria Garcia de la Banda**  
 Monash University  
 Maria.GarciadelaBanda@infotech.monash.edu.au

*Logic Programming Methodology & Applications*

**Gopal Gupta**  
 The University of Texas at Dallas  
 gupta@utdallas.edu

*Technical Notes and Rapid Communications*

**John Gallagher**  
 Roskilde University  
 jgg@ruc.dk

*Book Reviews*

**Krzysztof Apt**  
 CWI, The Netherlands  
 apt@cwi.nl

**EDITORIAL ADVISORS****C. Baral**

Arizona State University

**M. Bruynooghe**

Katholieke Universiteit Leuven

**M. Carlsson**

Swedish Institute of Computer Science

**A. Colmerauer**

Université d'Aix Marseille II

**V. Dahl**

Simon Fraser University

**D. De Schreye**

Katholieke Universiteit Leuven

**B. Demoen**

Katholieke Universiteit Leuven, Belgium

**J. Dix**

Clausthal University of Technology, Germany

**P.M. Dung**

Asian Institute of Technology, Thailand

**P. Flach**

University of Bristol

**M. Gabrielli**

University of Bologna

**M. Hermenegildo**

Universidad Politecnica de Madrid

**K. Inoue**

National Institute of Informatics, Japan

**J. Jaffar**

National University of Singapore

**A. Kakas**

University of Cyprus

**A. King**

University of Kent

**R.A. Kowalski**

Imperial College

**L. Libkin**

University of Toronto

**V. Lifschitz**

University of Texas at Austin

**D. Miller**

INRIA, École Polytechnique

**S. Muggleton**

Imperial College

**G. Nadathur**

University of Minnesota

**R. O'Keefe**

University of Otago, New Zealand

**F. Pereira**

University of Pennsylvania, USA

**L.M. Pereira**

Universidade Nova de Lisboa

**J.A. Robinson**

Highland Institute

**F. Rossi**

Università di Padova

**K. Sagonas**

Uppsala University

**T. Sato**

Tokyo Institute of Technology

**Z. Somogyi**

The University of Melbourne

**M. Truszczyński**

University of Kentucky

**K. Ueda**

Waseda University

**J.D. Ullman**

Stanford University

**M. Wallace**

Monash University

**D. S. Warren**

SUNY at Stony Brook, USA

**INTERNET ACCESS**

The journal is included in the Cambridge Journals Online service which can be found at [journals.cambridge.org/](http://journals.cambridge.org/). Refer also for other information to the dedicated journal web site at <http://logicprogramming.org/>