



Proceedings of the

**2002 ACM SIGPLAN
Workshop on Rule-Based Programming
(RULE'02)**

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Foreword

This volume contains the papers presented at the Third ACM SIGPLAN Workshop on Rule-Based Programming (RULE'02), held in conjunction with the 4th International Conference on Principles and Practice of Declarative Programming (PPDP), on October 5th, 2002, in Pittsburgh, Pennsylvania. RULE'02 continues the tradition established with the previous workshops and is again affiliated with the Principles, Logics, and Implementations of High-Level Programming Languages (PLI) meeting series, a confederation of conferences and workshops aimed at the advancement of high-level programming languages.

These proceedings contain eight papers which were selected from 13 submissions in a careful selection process. Each paper was read in full and evaluated by at least three international referees. Based on the referee reports, the program committee selected papers for presentation in an electronic PC meeting. In addition to contributed paper presentations, this year's workshop also includes an invited talk by Todd Proebsting (Microsoft Research, USA).

The basic concepts of rule-based programming appear throughout computer science, from theoretical foundations to practical implementations. Rule-based techniques are used in semantics in order to describe the meaning of programming languages, as well as in the implementation of program transformation systems. They are used implicitly or explicitly to perform computations, e.g., in Mathematica, OBJ, or ELAN, or to perform deductions, e.g., by using inference rules to describe or implement a logic, theorem prover or constraint solver. An extreme example of rule-based programming is the mail system in Unix which uses rules in order to rewrite mail addresses to canonical forms.

The goal of this workshop is to bring together researchers from the various communities working on rule-based programming to foster fertilisation between theory and practice, as well as to favour the growth of this programming paradigm. The selected papers reflect this goal well; their topics range from theoretical foundations through implementation issues to applications of rule-based programming.

Program Committee

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Bernd Fischer & Eelco Visser
Co-chairs

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