TERMGRAPH 2006

3rd International Workshop on Term Graph Rewriting

A satellite event of ETAPS April 2006 - Vienna

Call for Papers TERMGRAPH 2006

3rd International Workshop on Term Graph Rewriting

1 April 2006, Vienna, Austria

Term graph rewriting is concerned with the representation of functional expressions as graphs and the evaluation of these expressions by rule-based graph transformation. The advantage of using graphs rather than strings or trees is that common subexpressions can be shared, which improves the efficiency of computations in space and time. Sharing is ubiquitous in implementations of functional and logic programming languages, systems for automated reasoning, and symbolic computation systems.

Research in term graph rewriting ranges from theoretical questions to practical implementation issues. It includes such different lines as the modelling of (finite or infinitary) first-order term rewriting by (acyclic or cyclic) graph rewriting, interaction nets and sharing graphs for Lévy-optimal reduction in the lambda calculus, rewrite calculi on cyclic higher-order term graphs for the semantics and analysis of functional programs, graph reduction implementations of functional programming languages, and automated reasoning and symbolic computation systems working on shared structures.

The aim of this workshop is to bring together researchers working in these different domains and to foster their interaction, to provide a forum for presenting new ideas and work in progress, and to enable newcomers to learn about current activities in term graph rewriting. TERMGRAPH 2006 will be a one-day satellite event of the **ETAPS 2006**, which will take place in Vienna, 2006. The first TERMGRAPH workshop took place in Barcelona in 2002 and the second in Rome in 2004.

Topics

Topics of interest include all aspects of term graphs and sharing of common subexpressions in rewriting, programming, automated reasoning and symbolic computation. This includes (but is not limited to): Theory of first-order and higher-order term graph rewriting; Graph rewriting in lambda calculus (sharing graphs, interaction nets, optimality); Applications in functional, logic and functional-logic programming; Applications in automated reasoning and symbolic computation; Implementation issues; System descriptions.

Invited Speaker

Ugo Montanari, University of Pisa, Italy

Submissions and Publication

Authors are invited to submit an extended abstract (max. 10 pages) by e-mail to `ian.mackie@kcl.ac.uk` by 7 January, 2006. Preliminary proceedings will be available at the workshop. Submissions should be in PostScript or PDF format, using ENTCS style files. After the workshop authors are invited to submit a full paper of their presentation. Accepted contributions will appear in an issue of Elsevier's Electronic Notes in Theoretical Computer Science.

Important Dates

Submission deadline for Extended Abstracts: 7 January, 2006
Notification: 10 February, 2006
Pre-proceedings version due: 17 February, 2006
Workshop: 1 April, 2006
Submission deadline for ENTCS: 15 June, 2006. Notification: 15 September, 2006. Final Versions: 15 October, 2006.

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