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CALL FOR PAPERS

FUNDAMENTA INFORMATICAE
SPECIAL ISSUE ON
INTERSECTION TYPES AND RELATED SYSTEMS

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This special issue is devoted to the theory and practice of systems with intersection types and related systems (e.g., union types, refinement types etc.). While this special issue is inspired by the Workshop on Intersection Types and Related Systems (ITRS '08) held in Turin, Italy on March 25, 2008, submissions to this issue are not restricted to the papers presented at the workshop.

TOPICS AND PURPOSE

Types support reliable reasoning in many areas such as logic, programming languages, linguistics, etc. Intersection types were introduced near the end of the 1970s to overcome the limitations of Curry's type assignment system and to provide a characterization of the strongly normalizing terms of the Lambda Calculus. Although intersection types were initially intended for use in analyzing and/or synthesizing lambda models as well as in analyzing normalization properties, over the last twenty years the scope of theoretical research on intersection types has broadened. Recently, there have been a number of breakthroughs in the use of intersection types (and similar technology) for practical purposes such as program analysis. This special issue has its focus on the latest developments in intersection types and related systems.

Possible topics for submitted papers include, but are not limited to:

- Formal properties of systems with intersection types: principal typings, normalization properties, type inference.
- Results for related systems and approaches: systems with union types, refinement types, singleton types, or static analysis.
- Applications to lambda calculus and similar systems: denotational semantics, analysis/synthesis of lambda models (domains), characterization of operational properties, etc.
- Applications to programming languages: program analysis (flow, strictness, totality, etc.), accurate type error messages, increased flexibility with static typing, separate compilation and modularity, optimizing transformations, types for objects, etc.
- Applications to other areas: database query languages, program extraction from proofs, type systems for natural languages.

PAPER SUBMISSION DEADLINE: July 20, 2008.

SUBMISSIONS

Revised and enhanced versions of papers presented at the workshop or original submissions not previously published or under consideration for publication elsewhere are eligible for submission.

It is recommended that the manuscript, including bibliography, fits in 20-30 pages, using the Fundamenta Informaticae format (the latex style together with a bibliography style file and authors guide are available at http://fi.mimuw.edu.pl/submissions.html). If you need more, please contact the guest editor. All submitted papers will undergo a regular journal refereeing process according to the Fundamenta Informaticae standards.

The submissions should be sent in PDF format to the guest editor via email (gsilvia@uns.ns.ac.yu). For further information about this special issue, please do not hesitate to contact the guest editor.

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