Intersection Types and Related Systems (ITRS)

Preface

Types support reliable reasoning in many areas such as logic, linguistics, programming languages, software and hardware verification, among others. A comprehensive background is settled in the upcoming book by H.B. Barendregt, W. Dekkers and R. Statman [1].

Intersection types have been introduced in the late 1970s as a language for describing properties of lambda calculus which were not captured by all previous type systems. They provided the first characterisation of strongly normalising lambda terms and become a powerful syntactic and semantic tool for analysing various normalisation properties as well as lambda models.

Over the last thirty years the scope of 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, verification and concurrency. This issue is devoted to the latest developments in the theory and practice of intersection types and related systems.

The aim of the ITRS workshop series is to bring together researchers working both on theoretical developments and practical applications of intersection types and related systems with union types, recursive types, refinement types, behavioural types, etc. While this issue is inspired by The Fourth Workshop on Intersection Types and Related Systems - ITRS’08 held in Turin, Italy on March 25, 2008, submissions were not restricted to the papers presented at the workshop.

The Program Committee members of ITRS’08 were:

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