PLID’04 Call for Papers

The First International Workshop on Programming Language Interference and Dependence

August 25 2004, Verona, Italy

http://profs.sci.univr.it/~mastroeni/noninterference.html

(affiliated with SAS’04, LOPSTR’04, PEPM’04, and PPDP’04)

Organizers and Participants:

Torben Amtoft (Kansas State University)
Anindya Banerjee (Kansas State University)
David Clark (Kings College, London, UK)
Sebastian Danicic (Goldsmiths College, UK)
Roberto Giacobazzi (U. Verona, IT) (Chair)
Chris Hankin (Imperial College, London, UK)
Mark Harman (King’s College, London, UK)
John Howroyd (Goldsmiths College, UK)
Sebastian Hunt (City U., London, UK) (Organizing Co-chair)
Heiko Mantel (Zurich, Switzerland)
Isabella Mastroeni (U. Verona, IT) (Organizing Chair)
Lahcen Ouarbya (Goldsmiths College, UK)
Francesco Ranzato (U. Padova, IT)
Andrei Sabelfeld (Chalmers, Sweden)
David Sands (Chalmers, Sweden)
Herbert Wiklicky (Imperial College, London, UK)
Steve Zdancewic (Upson Hall Ithaca, NY)

Important Dates:

July 1, 2004 Expression of interest
July 20, 2004 Extended abstract
August 25, 2004 Workshop

Topics of interesting include (but are not limited to):

- Security against unwanted interference and dependence
- Models and theories of program interference
- Algorithms and techniques to reducing or removing interference or for ameliorating its effects
- Resource declassification
- Semantics of dependence and interference
- Analyses based on interference and dependence
- Quantitative methods for measuring interference
- Tools for interference and dependence analysis
- Abstract interpretation for dependence and interference

Interference essentially means that any possible variations of private data can cause a variation of public data. Dependence means that the outcome of one computation can affect another. This might, for example, mean that it is possible to get information about private data by observing public data. In order to prevent this kind of security violation it is important to analyse how information flows within the program in order to understand how private information propagates during the execution of a program. To achieve this, interference and dependence analysis must be performed, requiring theories, models and semantics for interference and dependence, algorithms and tools for analysis and reasoning about interference and dependence.

Discussion of the timeliness and relevance of the workshop:

The notion of non-interference is widely studied in the security community and interference and dependence are also important in understanding and reasoning about software. The aim of this workshop is to gather together the community of people that study dependence and interference from the different points of view in order to generate new possible research directions.

Organization and Submissions:

In this workshop we are interested in interference for imperative (deterministic/non-deterministic), concurrent/parallel, probabilistic functional, logic, and object-oriented languages. The workshop is intended to for discussion of on-going work and ideas in the field of dependence and interference. Those who are interested in having a talk at the workshop and/or discussing issues related with this subjects are invited to join the Organizing Committee. Please send your expression of interest to Isabella Mastroeni (mastroeni@sci.univr.it) before July 1st, 2004. A web-page will be organized collecting all the contributions. A special issue can be organized if the number of expressions of interest will be relevant. Submitted extended abstracts should be at most 5 pages Incs-style and should be sent before July 20th.

Venue:

Verona is among the most important historical and artistic town in Italy, with more than two thousand years of history. During the Roman Empire it was a political and commercial centre, whose magnificent traces can still be seen in the Arena and the Roman Theatre. Verona has always been synonymous with culture, nowadays it attracts people from everywhere thanks to the Arena, the myth of Romeo and Juliet and its precious beauty. Participants may also appreciate the cultural events in town, such as the opera at the Arena.