

Workshop on Exception Handling in Object Oriented Systems: towards Emerging Application Areas and New Programming Paradigms

July 21, 2003

ECOOP 2003

Call for Papers

There are two trends in the development of modern object oriented systems: they are getting more complex and they have to cope with an increasing number of exceptional situations. The most general way of dealing with these problems is by employing exception handling techniques. Many object oriented mechanisms for handling exceptions have been proposed but there still are serious problems in applying them in practice. These are caused by

- complexity of exception code design and analysis
- not addressing exception handling at the appropriate phases of system development
- lack of methodologies supporting the proper use of exception handling
- not developing specific mechanisms suitable for particular application domains and design paradigms.

Following the success of ECOOP 2000 workshop, this workshop aims at achieving better understanding of how exceptions should be handled in object oriented systems, including all aspects of software design and use: novel linguistic mechanisms, design and programming practices, advanced formal methods, etc.

The workshop will provide a forum for discussing the unique requirements for exception handling in the existing and emerging applications, including pervasive computing, ambient intelligence, the Internet, e-science, self-repairing systems, collaboration environments. We invite submissions on research in all areas of exception handling related to object oriented systems, in particular: formalisation, distributed and concurrent systems, practical experience, mobile object systems, new paradigms (e.g. object oriented workflows, transactions, multithreaded programs), design patterns and frameworks, practical languages (Java, Ada 95, Smalltalk, Beta), open software architectures, aspect oriented programming, fault tolerance, component-based technologies.

We encourage participants to report their experiences of both benefits and obstacles in using exception handling, reporting, practical results in using advanced exception handling models and the best practice in applying exception handling for developing modern applications in the existing practical settings.

We intend to discuss the problem of perceived complexity in using and understanding exception handling: why do programmers and practitioners often believe that it complicates system design and analysis? What should be done to improve the situation? Why is exception handling the last mechanism to learn and to use? What is wrong with the current practice and teaching?

We are interested in position papers analysing the question of why the exception handling mechanisms available in earlier object oriented languages are not widely used now.

To participate in the workshop, the prospective attendees are required to submit 4-7 page position papers (in the LNCS format) to Alexander Romanovsky (alexander.romanovsky@ncl.ac.uk) **by April 25**. The authors of the accepted papers will be notified **by May 17**.

Workshop organisers:

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<i>Christophe Dony</i>	Universite Montpellier-II
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More information: www.cs.ncl.ac.uk/~alexander.romanovsky/home.formal/ehoos2003.html