

Preliminary CFP for the ACM-SAC'2005

Track on Software Engineering: Methods, Practices and Tools

Context

Since 20 years, the annual ACM SAC Symposium on Applied Computing presents the most recent development in applied computing. The quality of the underlying Software Engineering methods is crucial for the success of nearly all other recent developments in the fields. For this reason, Software Engineering will be an integrated part of the ACM-SAC 2005 symposium too. The Software Engineering Track aims at providing researchers and practitioners with an embedded forum to present and discuss their ideas and experiences about improving SE processes, models, verification methods and CASE tools, as well as new SE development concepts and fundamental paradigms. Previous editions of the Software Engineering Track at ACM-SAC have been regarded as successful, and the progress shall be continued in future.

Topics

The nature and practice of Software Engineering underwent considerable changes during the past few years: The classical Waterfall Paradigm of software development gets more and more attacked by the Agile Methods paradigm in the context of Xtreme Programming. New SE paradigms have been developed for Agent- and Component based systems, and Aspect Oriented development is not unlikely to overtake the classical Object Orientated development as the leading industrial software practice in near future. In a somewhat contrary movement, the application of Formal Methods became a widely acknowledged and accepted ingredient to the qualitative improvement of software development within the framework of

the classical Waterfall Paradigm. Moreover, we anticipate the emergence of Xtreme Modelling through combining Formal Methods with the development principles of Xtreme Programming, whilst other exciting future fields like Massive Parallel Computation and Cellular Automata are still stuck on the conceptual low level of Assembler Programming, yet desperately awaiting the advent of any kind of higher-level programming and SE techniques at all.

All these matters shall be addressed by our track for which we have identified the following (non exclusive) list of topics:

? Classical versus Model-Based Testing, Validation and Verification ? Aspect-Oriented versus Object-Oriented Software Engineering ? Evolution of the UML Approach and other Visual Modelling Techniques ? Project Planning and Development Process Management ? Agile Methods and Xtreme Programming ? Post-Xtreme-Programming Requirements Engineering ? Xtreme Modelling and Model-Driven Prototyping ? Model-Driven Architecture and Interface Design ? Software Reuse and Component-Based Development ? Refinement and Automated Code Generation ? Rapid Prototyping and Performance Estimations ? Software Reliability and Software Fault Tolerance ? Software Metrics, Cost Estimations and Benchmarking ? Reengineering, Reverse Engineering and Software Maintenance ? CASE Tools and Artificial-Intelligence- Assisted Software Development ? Agent and Real-Time Embedded Systems ? High-Level Programming and Software Engineering for Massive-Parallel Computing and Cellular Automata

Unpublished Original Papers and / or significant Experience Reports from Academia and Industry are sought in the above-indicated areas of Software Engineering. Details of the submission process will soon be published at the Conference Website (address see below) and will also be announced in an updated follow-up version of this CFP. Each submitted paper will be carefully reviewed according to the ACM-SAC regulations by at least three independent reviewers. Paper selection will solely be based on the usual criteria of scientific quality, and not on any kind of personal discrimination. Upon acceptance of their paper, prospective authors must provide a revised, camera-ready version of their paper which takes into account the comments made by the anonymous reviewers, and which strictly obeys to the type setting and layout regulations of the ACM-SAC proceedings scheme. Papers not conforming to these layout rules cannot be accepted. For a paper to be printed in the Conference Proceedings it is also mandatory that at least one author of that paper is registered for conference attendance.

Contact Information

Questions about this Software Engineering Track, especially about the not yet outlined submission details, should be addressed to the Track Chair (Email: stefan.gruner@sihe.ac.uk). Questions about the ACM-SAC-2005 Symposium in general should be addressed to the Symposium Organisers (Conference Website: see below).

(Preliminary) Important Dates

Submission of Papers Deadline: September 3rd, 2004
Author Notification: October 15th, 2004
Camera-ready copy of Accepted Papers: November 5th, 2004

Track Chairs and (Preliminary) Track PC Members

Stefan Gruner (Track-Chair), SIHE Swansea (GB)

Alessandra Cavarra (Co-Chair), University of Oxford (GB)

Sung Shin (Co-Chair), South-Dakota State University (USA)

burgh (GB)

Andrew Gravell, University of Southampton (GB)

Andrew Simpson, University of Oxford (GB)

Susana Munoz-Hernandez, Universidad Politecnica de Madrid (E)

Tiziana Margaria,
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Jenny Li, Avaya Labs Research Corp. (USA)

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Dongwon Lee, Pennsylvania State University (USA)

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Conference Website

<http://www.acm.org/conferences/sac/sac2005/>