



Call for Papers – ICTAC 2010

International Colloquium on Theoretical Aspects of Computing

Natal, Rio Grande do Norte, Brazil – 1-3 September, 2010

[<http://www.ictac.net/ictac2010>]

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Background and Objectives

ICTAC is an International Colloquium on Theoretical Aspects of Computing created by the International Institute for Software Technology of the United Nations University (UNU-IIST). The aim of the colloquium is to bring together practitioners and researchers from academia, industry and government to present research results, and exchange experience, ideas and solutions for their problems in theoretical aspects of computing. Beyond these scholarly goals, another main purpose of the conference is to promote cooperation in research and education between participants and their institutions, from developing and industrial countries, as in the mandate of the United Nations University. The previous six ICTAC events were held in Guiyang, China (2004), Hanoi, Vietnam (2005), Tunis, Tunisia (2006), Macau (2007), Istanbul, Turkey (2008) and Kuala Lumpur, Malaysia (2009). ICTAC 2010 includes two special tracks: a track on Formal Approaches to Testing, chaired by Marie-Claude Gaudel, and a track on the Grand Challenge in Verified Software, chaired by Jim Woodcock.

The topics of the conference include, but are not limited to:

- automata theory and formal languages
- principles and semantics of programming languages
- logics and their applications
- software architectures and their description languages
- software specification, refinement, verification and testing,
- model checking and theorem proving
- formal techniques in software testing
- models of object and component systems
- coordination and feature interaction
- integration of theories, formal methods and tools for engineering computing systems
- service-oriented development
- service-oriented architectures: models and development methods
- document-driven development
- models of concurrency, security, and mobility
- theory of parallel, distributed, and grid computing
- real-time, embedded and hybrid systems
- type and category theory in computer science
- case studies, theories, tools and experiments of verified systems
- domain-specific modeling and technology: examples, frameworks and experience

ICTAC 2010 will be held in Brazil, in the city of Natal, Rio Grande do Norte. It will be organized jointly with the 3rd edition of the Pernambuco School on Software Engineering, to be held in Recife, Pernambuco, on the the topic of Formal Component Based Development and Coordination. ICTAC 2010 will include tutorials and technical sessions.

Sponsors and Organisation

ICTAC 2010 will be organized jointly by the Federal University of Rio Grande do Norte and UNU-IIST. They are also sponsors of ICTAC 2010.

Invited Speakers

Paulo Borba (Federal University of Pernambuco) Wolfram Schulte (Microsoft Research)

Submission and Publication

Submissions to the conference must not have been published or be concurrently submitted elsewhere. Submissions will be judged on the basis of originality, contribution to the field, technical and presentation quality, and relevance. Papers should be in English and at most 15 pages in LNCS format (see <http://www.springer.de/comp/lncs/authors.html> for details). Submission address <http://www.easychair.org/conferences/?conf=ictac2010>. Proceedings will be published by Springer as a LNCS volume. The authors of a selection of the accepted papers will be invited to submit an extended version of their work for a special issue of Theoretical Computer Science. Send inquiries to: ictac2010@iist.unu.edu.

Important Dates

Submission of abstracts: March 08th, 2010;

Submission deadline: March 15th, 2010;

Main event: September 1st–3rd, 2010.

Notification of results: April 30th, 2010;

Final version: May 16th, 2010