



Tunisian Society for
Digital Security



Digital Security
Research Unit

4th International Symposium on Symbolic Computation in Software Science

15 - 17 December, 2012 | Gammarth, Tunisia

Honorary Chairs

- Prof. Nobuhiro Yamada (President of the University of Tsukuba, Japan)
- Prof. Lassaad El Asmi (President of the University of Carthage, Tunisia)

General Chairs

- Prof. Adel Bouhoula (University of Carthage, Tunisia)
- Prof. Tetsuo Ida (University of Tsukuba, Japan)

Programme Chair

- Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, UK)

Local Organisation Chair

- Dr. Mohamed Becha Kaaniche (University of Carthage, Tunisia)

Invited Speakers

- Gerad Huet (France)
- Kazuhiro Yokoyama (Japan)

Programme Committee Members

- Anas Abou El Kalam (Morocco)
- Serge Autexier (Germany)
- Mauricio Ayala-Rincon (Brazil)
- Henda Ben Ghezala (Tunisia)
- Iliano Cervesato (Qatar)
- Veronique Cortier (France)
- Mariangiola Dezani (Italy)
- Sihem Guemara El Fatmi (Tunisia)
- Sylvia Ghilezan (Serbia)
- Ahmed Hadj Kacem (Tunisia)
- Therese Hardin (France)
- Mohamed Jmail (Tunisia)
- Tudor Jebelean (Austria)
- Fairouz Kamareddine (UK) (chair)
- Helene Kirchner (France)
- Temur Kutsia (Austria)
- Pierre Lescanne (France)
- Manuel Maarek (France)
- Mohammed Mezghiche (Algeria)
- Greg Michaelson (UK)
- Aart Middeldorp (Austria)
- Ali Mili (USA)
- Yasuhiko Minamide (Japan)
- Mohammed Mosbah (France)
- Flavio de Moura (Brazil)
- Valeria de Paiva (USA)
- David Plaisted (USA)
- Riadh Robbana (Tunisia)
- Michael Rusinowitch (France)
- Amr Sabry (USA)
- Mahmoud Al-Saheb (Palestine)
- Masahiko Sato (Japan)
- Yahya Slimani (Tunisia)
- Sofiene Tahar (Canada)
- Martin Wirsing (Germany)

Local Organising Committee

- Ryma Abassi (Tunisia)
- Mohamed Becha Kaaniche (Tunisia) (chair)
- Nizar Ben Neji (Tunisia)
- Nihel Ben Youssef (Tunisia)
- Hanen Boussi (Tunisia)
- Wahida Boutabba (Tunisia)
- Fadoua Ghourabi (Japan)
- Faten Labbene Ayachi (Tunisia)
- Lilia Maalej Frikha (Tunisia)
- Oussama Mahjoub (Tunisia)

Important Dates

- June 15, 2012: Paper title and abstract deadline
- June 21, 2012: Full paper deadline (firm)
- September 1, 2012: Author notification
- October 1, 2012: Final version deadline (firm)
- December 15-17, 2012: Symposium

SCSS 2012 Website

- <http://www.supcom.mincom.tn/SCSS2012/>



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Call for Papers

Symbolic computation is the science of computing with symbolic objects (terms, formulae, programs, algebraic objects, geometrical objects, etc). Powerful symbolic algorithms have been developed during the past decades and have played an influential role in theorem proving, automated reasoning, software verification, model checking, rewriting, formalisation of mathematics, network security, Groebner bases, characteristic sets, etc.

The international Symposium on "Symbolic Computation in Software Science" is the fourth in the SCSS workshop series. SCSS 2008 and 2010 took place at the Research Institute for Symbolic Computation (RISC), Hagenberg, Austria, and, SCSS 2009 took place in Gammarth, Tunisia. These symposium grew out of internal workshops that bring together researchers from :

- SCORE (Symbolic Computation Research Group) at the University of Tsukuba, Japan,
- Theorema Group at the Research Institute for Symbolic Computation, Johannes Kepler University Linz, Austria,
- SSFG (Software Science Foundation Group) at Kyoto University, Japan, and
- The Digital Security Research Unit at the Higher School of Communication of Tunis (Sup'Com) at the University of Carthage, Tunisia.
- The Tunisian Society for Digital Security

These workshops have been successful and in this new edition, we would like to extend the range of symbolic computation methods in their applications. In this symposium, we solicit papers on all aspects of symbolic computations and their applications. The topics of the symposium include, but are not limited to the following:

- automated reasoning
- algorithm (program) synthesis and/or verification
- formal methods for the analysis of network security
- termination and/or complexity analysis of algorithms/programs
- extraction of specifications from algorithms
- theorem proving methods and techniques
- proof-carrying code
- generation of inductive assertion for algorithm (programs)
- algorithm (program) transformations
- formalisation and computerisation of knowledge (maths, medicine, economy, etc.)
- component-based programming
- computational origami
- query languages (in particular for XML documents)
- semantic web and cloud computing

SOFTWARE DEMO

SCSS 2012 will provide an opportunity for developers of software related to symbolic computation, to promote their software systems. SCSS 2012 will have a special session for software systems descriptions where authors can present their projects and demonstrate their software. Submission in this category of software demo should have a link to project pages and ideally a downloadable software.

PAPER SUBMISSION

Submissions for full papers must not exceed 10 pages (in font 10 or higher), with up to 5 additional pages for references and technical appendices. Shorter papers, associated with system descriptions are welcome. The paper's main results must not be published or submitted for publication in refereed venues, including journals and other scientific meetings. It is expected that each accepted paper be presented at the meeting by one of its authors.

Papers will be reviewed and evaluated with respect to relevance, clarity, quality, originality, and impact. Proposed contributions should be in English, and consist of a scholarly exposition accessible to the non-specialist, including motivation, background, and comparison with related works. All papers should be prepared in LaTeX and formatted according to the requirements of Springer's LNCS series (the corresponding style files can be downloaded from <http://www.springer.de/comp/lncs/authors.html>). Papers must be submitted electronically at the relevant area for SCSS12 on [easyChair](#).

A title and single-paragraph abstract should be submitted by June 15, and the full paper by June 21 (firm date). Notifications are expected by September 1, and final papers for the proceedings will be due by October 1 (firm date).

PROCEEDINGS

The proceedings of SCSS 2012, will be published in advance of the meeting as a volume in either Electronic Notes in Theoretical Computer Science (ENTCS) or the British Computer Society's Electronic Workshops in Computing eWIC. After the Symposium, authors will be invited to submit a full version of their article for a special issue of the Journal of Symbolic Computation on SCSS 2012. These articles will be subjected to the normal peer review process of the Journal of Symbolic Computation.