

Tunisian Society for Digital Security

The Tunisian Society for Digital Security has set an ambitious program to bring together the largest number of Tunisian expertise in this strategic area of technology, thereby facilitating the establishment of a fruitful synergy between the various incentives for the technological innovation.

The birth of "ATSN" corresponds to the date of the second phase of the World Summit on the Information Society (WSIS) that took place in Tunis on November 2005.

Our main missions

- Contribution to the research development and innovation in digital security technology field.
- Promotion of national and international achievements in the field of digital security.
- Contribution to the dissemination of digital culture, mainly among young people, and the awareness of digital security importance and that by organizing seminars and exhibitions on this theme.

Patents and publications

Our new results have been either patented in USA, Europe or published in the most leading and prestigious international journals and conferences like ACM, IEEE, Springer, etc.

A renowned competition

MIT Arab Business Plan Competition

We have participated in the prestigious competition for the best Arab plan to create an innovative enterprise, organized by the "MIT Enterprise Forum" of the Pan Arab region. 1241 candidates from 17 Arab countries took part in the competition and our project has not only reached the final but it was perceived by a specialized jury, as the most innovative among the 9 finalists in this competition of 2009.



ATSN - AL SAADA GREEN PARK
2078 MARSA SAFSAF
TUNIS - TUNISIA
FAX: +216 71 856 829
EMAIL: atsn@planet.tn
adel.bouhoula@gmail.com
WEB: www.atsn.org.tn

International Symposium on Symbolic Computation in Software Science Gammarth, Tunisia, December 15-16, 2012



Tunisian Society for Digital Security



Digital Security Research Unit

Organize the

International Symposium on Symbolic Computation in Software Science

Gammarth, Tunisia, December 15-16, 2012



In collaboration with :



- 09:00 - 09:30** **Official Opening Session**
- Welcome speech by Prof. Adel Bouhoula President of the Tunisian Society for Digital Security and Co-chair of SCSS 2012
 - Welcome speech by Prof. Tetsuo Ida (Tsukuba University, Japan) Co-chair of SCSS 2012
 - Welcome speech by Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, Scotland) Program Chair of SCSS 2012
 - Opening Speech
- Session 1** **Chair: Prof. Sami Tabbane (University of Carthage, Tunisia)**
Vice President of the Tunisian Society for Digital Security
- 09:30 - 10:30 Invited talk by Prof. Gerard Huet (INRIA, France)
 Eilenberg machines revisited as a general paradigm for relational programming
- 10:30 - 11:00 Coffee Break
- Session 2** **Chair: Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, Scotland)**
- 11:00 - 11:30 Maissa Elleuch (University of Sfax, Tunisia)
 Osman Hasan (Concordia University, Canada)
 Sofiene Tahar (Concordia University, Canada)
 Mohamed Abid (University of Sfax, Tunisia).
 Formal Probabilistic Analysis of a Wireless Sensor Network for Forest Fire Detection
- 11:30 - 12:00 Assia Ben Shil, Kaouther Blibech (University of Tunis El Manar, Tunisia)
 Riadh Robbana (University of Tunis El Manar, Tunisia)
 Wafa Neji (University of Tunis El Manar, Tunisia)
 A New PVSS Scheme with a Simple Encryption Function
- 12:00 - 12:30 Saleem Al-Akhras (Concordia University, Canada)
 Sofiene Tahar (Concordia University, Canada)
 Gabriela Nicolescu (Ecole Polytechnique de Montreal, Canada)
 Michel Langevin (STMicroelectronics Inc., Ottawa, Canada)
 Pierre Paulin (STMicroelectronics Inc., Ottawa, Canada)
 On the Verification of a WiMax Design using Symbolic Simulation
- 12:30 - 14:00 Lunch Break
- Session 3** **Chair: Prof. Gerard Huet (INRIA France)**
- 14:00 - 15:00 Invited Talk by Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, Scotland)
 On MathLang, a system for the computerisation of mathematics
- Session 4** **Chair: Prof. Kazuhiro Yokoyama (Rikkyo University, Japan)**
- 15:00 - 15:30 Hatem Ghabry (University of Carthage, Tunisia and INRIA Nancy Grand Est, France)
 Ghazi Maatoug (University of Carthage, Tunisia and INRIA Nancy Grand Est, France)
 Michael Rusinowitch (INRIA Nancy Grand Est, France).
 Compiling symbolic attacks to protocol implementation tests
- 15:30 - 16:00 Mohamed Chaabani (University of Boumerdes, Algeria)
 Mohamed Mezghiche (University of Boumerdes, Algeria)
 Martin Strecker (University of Toulouse, France).
 Formal verification of a proof procedure for the description logic ALC
- 16:00 - 16:30 Razika Lounas (University of Boumerdes, Algeria)
 Mohamed Mezghiche (University of Boumerdes, Algeria)
 Jean-Louis Lanet (University of Limoges, France)
 Towards a General Framework for Formal Reasoning about Java Bytecode Transformation

- Session 5** **Chair: Prof. Sofiene Tahar (Concordia University, Canada)**
- 09:30 - 10:30 Invited talk by Prof. Kazuhiro Yokoyama (Rikkyo University, Japan)
 Quantifier Elimination for Solving Real Engineering Problems
- Session 6** **Chair: Dr. Mohamed Hamdi (University of Carthage, Tunisia)**
- 10:30 - 11:00 Naeem Abbasi (Concordia University, Canada)
 Osman Hasan (Concordia University, Canada)
 Sofiene Tahar (Concordia University, Canada)
 Formal Analysis of Soft Errors using Theorem Proving
- 11:00 - 11:30 Ryma Abassi (University of Carthage, Tunisia)
 Sihem Guemara El Fatmi (University of Carthage, Tunisia)
 Delegation Management Modeling in a Security Policy based Environment
- 11:30 - 12:00 Amira Henaïen (University of Carthage, Tunisia and University of Metz, France)
 Sorin Stratulat (University of Metz, France).
 Performing Lazy and Mutual Induction Reasoning with Certifying Proof Environments
- 12:00 - 14:00 Lunch Break
- Session 7** **Chair: Mohamed Becha Kaaniche (University of Carthage, Tunisia)**
- 14:00 - 15:00 Invited Talk by Dr. Mohamed Hamdi (University of Carthage, Tunisia)
 Mathematical models for anonymity, privacy, and censorship in communication networks
- Session 8** **Chair: Prof. Sihem Guemara El Fatmi (University of Carthage, Tunis)**
- 15:00 - 15:30 Nihel Ben Youssef (University of Carthage, Tunisia)
 Adel Bouhoula (University of Carthage, Tunisia).
 Optimal and safe network partitioning using graph techniques
- 15:30 - 16:00 Nizar Ben Neji (University of Carthage, Tunisia)
 Masato Kimura (University of Tsukuba, Japan)
 Adel Bouhoula (University of Carthage, Tunisia)
 Enabling flexible packet filtering through the K-map priority elimination technique
- 16:00 - 16:30 Hanen Boussi (University of the west of England, Bristol, UK)
 Semantic-Based Policies Federation on Data Clouds
- 16:30 - 17:00 Fadoua Ghourabi (University of Tsukuba, Japan)
 Asem Kasem (Yarmouk Private University, Syria)
 Cezary Kaliszcyk (University of Innsbruck, Austria).
 Algebraic Analysis of Huzita's Origami Operations and their Extensions
- 17:00 - 18:00 Closing Cocktail Party