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.

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Tunisian Society for Digital Security

Digital Security Research Unit

Organize the

Workshop on Formal methods for specifying and verifying critical systems

Elgazala Technopark – Tunisia
December 7th, 2011

In collaboration with :

SUP'COM

SCORE
Symbolic Computation Research Group

HERIOT WATT UNIVERSITY

Elgazala Technopark

Tsukuba University

Inria

9:00 – 9:30   **Official Opening Session**

- Welcome speech by Prof. Adel Bouhoula President of the Tunisian Society for Digital Security and member of the High Level Committee for Science and Technology
- Welcome speech by Prof. Tetsuo Ida (Tsukuba University, Japan)
- Opening Speech

Session 1   **Chair: Prof. Sami Tabbane (University of Carthage, Tunisia)**
                   Vice President of the Tunisian Society for Digital Security

9:30 – 10:10   Invited talk by
Prof. Tetsuo IDA (Tsukuba University, Japan)
Techniques and tools for automated proofs of certain geometrical properties

Session 2   **Chair: Prof. Tetsuo Ida (Tsukuba University, Japan)**

10:10 – 10:50   Invited talk by
Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, Scotland)
On MathLang, a system for the computerisation of mathematics

10:50 – 11:10   **Coffee Break**

Session 3   **Chair: Prof. Fairouz Kamareddine (Heriot-Watt University, Edinburgh, Scotland)**

11:10 – 11:50   Invited talk by
Prof. Adel Bouhoula (University of Carthage, Tunisia)
An Overview of proof by induction techniques and their application in the verification of security protocols

Session 4   **Chair: Dr. Mohamed Hamdi (University of Carthage, Tunisia)**

11:50 – 12:10   Hedi Ben Zina (The Ecole Normale Supérieure of Cachan, Paris, France)
Securing Hypervisors through temporal logic and security policies.

12:10 – 12:30   Nizar Ben Neji (University of Carthage, Tunisia)
Masato Kimura (Tsukuba University, Japan)
Adel Bouhoula (University of Carthage, Tunisia)
Enabling flexible packet filtering through the K-map priority elimination technique

12:30 – 14:00   **Lunch Break**

Session 5   **Chair: Dr. Faten Labbene Ayachi (University of Carthage, Tunisia)**
                   Vice President of the Tunisian Society for Digital Security

14:00 – 14:30   Invited Talk by
Dr. Sorin Stratulat (University of Metz, France)
Certifying implicit induction proofs

Session 6   **Chair: Dr. Hanen Boussi (University of the west of England, Bristol, UK)**

14:30 – 15:00   Invited Talk by
Dr. Mohamed Hamdi (University of Carthage, Tunisia)
Mathmateical models for anonymity, privacy, and censorship in communication networks

Session 7   **Chair: Dr. Sorin Stratulat (University of Metz, France)**

15:00 – 15:30   Invited Talk by
Dr. Hanen Boussi (University of the west of England, Bristol, UK)
A formal specification of privacy policies with added semantics

15:30 – 15:50   **Coffee Break**

Session 8   **Chair: Prof. Sihem Guemara El Fatmi (University of Carthage, Tunisia)**

15:50 – 16:10   Ryma Abassi (Higher Institute of Technological Studies of Communications, Tunisia)
Sihem Guemara (University of Carthage, Tunisia)
Using security policies in a network securing process

16:10 – 16:30   Mohamed Ali Ayachi (University of Kairouan, Tunisia)
Christophe Bidan (Supelec Rennes, France)
Adel Bouhoula (University of Carthage, Tunisia)
A network layer intrusion detection mechanism

16:30 – 16:50   Nihel Ben Youssef (University of Carthage, Tunisia)
Adel Bouhoula (University of Carthage, Tunisia)
Automatic verification of firewall configurations

16:50 – 17:10   Oussama Mahjoub (University of Carthage, Tunisia)
Adel Bouhoula (University of Carthage, Tunisia)
An overview of the prototypes developed by the "Tunisian society for digital security" and the "Digital Security Research Unit"

17:10 – 18:00   **Closing Cocktail Party**