# **SECURWARE 2014**

# Foreword

The Eighth International Conference on Emerging Security Information, Systems and Technologies (SECURWARE 2014), held between November 16-20, 2014 in Lisbon, Portugal, continued a series of events covering related topics on theory and practice on security, cryptography, secure protocols, trust, privacy, confidentiality, vulnerability, intrusion detection and other areas related to low enforcement, security data mining, malware models, etc.

Security, defined for ensuring protected communication among terminals and user applications across public and private networks, is the core for guaranteeing confidentiality, privacy, and data protection. Security affects business and individuals, raises the business risk, and requires a corporate and individual culture. In the open business space offered by Internet, it is a need to improve defenses against hackers, disgruntled employees, and commercial rivals. There is a required balance between the effort and resources spent on security versus security achievements. Some vulnerability can be addressed using the rule of 80:20, meaning 80% of the vulnerabilities can be addressed for 20% of the costs. Other technical aspects are related to the communication speed versus complex and time consuming cryptography/security mechanisms and protocols.

Digital Ecosystem is defined as an open decentralized information infrastructure where different networked agents, such as enterprises (especially SMEs), intermediate actors, public bodies and end users, cooperate and compete enabling the creation of new complex structures. In digital ecosystems, the actors, their products and services can be seen as different organisms and species that are able to evolve and adapt dynamically to changing market conditions.

Digital Ecosystems lie at the intersection between different disciplines and fields: industry, business, social sciences, biology, and cutting edge ICT and its application driven research. They are supported by several underlying technologies such as semantic web and ontology-based knowledge sharing, self-organizing intelligent agents, peer-to-peer overlay networks, web services-based information platforms, and recommender systems.

We take here the opportunity to warmly thank all the members of the SECURWARE 2014 Technical Program Committee, as well as the numerous reviewers. The creation of such a high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to SECURWARE 2014. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the SECURWARE 2014 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that SECURWARE 2014 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in emerging security information, systems and technologies. We are convinced that the participants found the event useful and communications very open. We hope Lisbon provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

# SECURWARE 2014 Chairs:

#### **SECURWARE Advisory Chairs**

Juha Rőning, University of Oulu, Finland Catherine Meadows, Naval Research Laboratory - Washington DC, USA Petre Dini, Concordia University, Canada / China Space Agency Center - Beijing, China Reijo Savola, VTT Technical Research Centre of Finland, Finland Masaru Takesue, Hosei University, Japan Mariusz Jakubowski, Microsoft Research, USA Emmanoil Serelis, University of Piraeus, Greece William Dougherty, Secern Consulting - Charlotte, USA

### **SECURWARE 2014 Industry Liaison Chair**

Rainer Falk, Siemens AG - München, Germany

# SECURWARE 2014 Research/Industry Chair

Mariusz Jakubowski, Microsoft Research, USA