

# CYBER 2018

## Forward

The Third International Conference on Cyber-Technologies and Cyber-Systems (CYBER 2018), held between November 18, 2018 and November 22, 2018 in Athens, Greece, continued the inaugural event covering many aspects related to cyber-systems and cyber-technologies considering the issues mentioned above and potential solutions. It is also intended to illustrate appropriate current academic and industry cyber-system projects, prototypes, and deployed products and services.

The increased size and complexity of the communications and the networking infrastructures are making it difficult the investigation of the resiliency, security assessment, safety and crimes. Mobility, anonymity, counterfeiting, are characteristics that add more complexity in Internet of Things and Cloud-based solutions. Cyber-physical systems exhibit a strong link between the computational and physical elements. Techniques for cyber resilience, cyber security, protecting the cyber infrastructure, cyber forensic and cyber crimes have been developed and deployed. Some of new solutions are nature-inspired and social-inspired leading to self-secure and self-defending systems. Despite the achievements, security and privacy, disaster management, social forensics, and anomalies/crimes detection are challenges within cyber-systems.

The conference had the following tracks:

- Cyber security
- Cyber infrastructure
- Cyber Attack Surfaces and the Interoperability of Architectural Application Domain Resiliency
- Embedded Systems for the Internet of Things
- Cyber resilience

We take here the opportunity to warmly thank all the members of the CYBER 2018 technical program committee, as well as all the 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 that dedicated much of their time and effort to contribute to CYBER 2018. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the CYBER 2018 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that CYBER 2018 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the domain cyber technologies and cyber systems. We also hope that Athens, Greece, provided a pleasant environment during the conference and everyone saved some time to enjoy the historic charm of the city.

## **CYBER 2018 Chairs**

### **CYBER Steering Committee**

Carla Merkle Westphall, Federal University of Santa Catarina (UFSC), Brazil  
Cong-Cong Xing, Nicholls State University, USA  
Jean-Marc Robert, Polytechnique Montréal, Canada  
Steve Chan, Massachusetts Institute of Technology (MIT), USA  
Jan Richling, South Westphalia University of Applied Sciences, Germany  
Duminda Wijesekera , George Mason University, USA  
Francesco Buccafurri, University Mediterranea of Reggio Calabria, Italy  
Syed Naqvi, Birmingham City University, UK

### **CYBER Industry/Research Advisory Committee**

Rainer Falk, Siemens AG, Corporate Technology, Germany  
Cristina Serban, AT&T Security Research Center, Middletown, USA  
Juan-Carlos Bennett, SSC Pacific, USA  
Barbara Re, University of Camerino, Italy  
Daniel Kaestner, AbsInt GmbH, Germany  
George Yee, Carleton University / Aptusinnova Inc., Canada  
Yao Yiping, National University of Defence Technology - Hunan, China  
Thomas Klemas, SimSpace Corporation, USA