

# Dr. Gianpiero Costantino

Nationality: Italian

Date of birth: 25/02/1984

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## Education

### March 2011.

Ph.D. in Computer Science, University of Catania (Italy).  
Thesis title "*Enforcing trust, collaboration and power-saving in MANETs*"

### July 2007.

Master Degree in Computer Science, 110/110 *Summa Cum Laude*, University of Catania (Italy).

### November 2005.

Bachelor Degree in Computer Science, 110/110, University of Catania (Italy).

### July 2002.

Five years diploma at the Industrial technical institute.

## Experience

### 1 | September 2015 – Present.

Fixed-term Researcher, Institute for Informatics and Telematics of the National Research Council (IIT-CNR), Pisa, Italy.

### 2 | January 2011 – August 2015.

Post Doc. Researcher, Institute for Informatics and Telematics of the National Research Council (IIT-CNR), Pisa, Italy.

### 3 | January 2010 – April 2010.

Ph.D. visitor for 4 months at the Computer Lab., University of Cambridge (UK).

### 4 | September 2012 – Present.

Co-founder of Phook: The Search Engine for Social Photos, [www.myphook.com](http://www.myphook.com)

## Research Interests

### Current:

Security and Privacy for Cloud Computing  
Security, Privacy and Trust for Cypher Physical Systems.  
Privacy within Opportunist Networks and Fog Computing.  
IoT Privacy.

*Previous:*

- Social Network Privacy.
- Trustworthiness for Composite Services.
- Social Web Services.
- Mobile Ad Hoc Networks (MANET)s.

## Main Research Achievements

I have published 37 peer-reviewed papers, of which:

- 31 in international conferences and workshops
- 6 in international journals

Plus:

- 1 book chapter;
- 2 Technical report;

### *Ph.D. Info*

My PhD track record focused on users' mobility and their collaboration within Mobile Ad hoc Networks (MANETs). These networks are characterised by the presence of wireless devices that are connected each other without a prefixed-infrastructure. Here, I studied and proposed techniques apt to establish users' reputation, mechanisms to enforce collaboration and a power-saving protocol for mobile devices. Users' reputation was calculated by observing, in a direct and indirect manner, the ratio of packet generated and forwarded by each user. Collaboration was measured using the previous reputation model, and uncooperative users were penalised with a low Quality of Service (QoS). Finally, I extended my research on proposing a power-saving solution for the Dynamic Source Routing (DSR) protocol, which is mainly used in MANETs. Part of this protocol was developed during my four months in the Computer Laboratory of the University of Cambridge with the supervision of Prof. Jon Crowcroft.

## Other Experience

### *Phook: The Search Engine for Social Photos*

Phook is a web-application that I developed with my ex-colleague Dr. Daniele Sgandurra aimed at providing the first search engine for photos on Social Networks. Phook can search across two Social Networks, such as Facebook and Instagram. With Phook, we developed an algorithm able to collect 150.000 per minute of links of private users' photo.

Currently, Phook has more than 3000 registered users and about 500.000.000 of links to private users' photo. Phook got several articles in the Italian national press: <http://www.myphook.com/press.php> and also it was presented in the show Pixel on RAI3. which is one of the most popular italian TV channel.

1| **May 2007 – June 2007.**

Developer of a software for Supply Chain Management, University of Catania.

2| **March 2006 – April 2006.**

Developer of a JAVA-software for Supply Chain Management using JADE as middleware for agent paradigm.

3| **June 2005 – September 2005.**

Developer of a software for distributed backup, University of Catania.

*Journal Publications*

- [j1] **Private Mobility-cast for Opportunistic Networks.** G. Costantino, R. R. Maiti, F. Martinelli, P. Santi. *Computer Networks Journal (COMNET)*. Volume 120, June 2017, Pages 28–42. Impact Factor: 0.755. Get it from: <http://tiny.cc/ot6hky>
- [j2] **Enhancing Video Surveillance with Usage Control and Privacy-Preserving Solutions.** E. Carniani, G. Costantino, F. Marino, F. Martinelli, P. Mori. *Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications (JoWUA)*. Volume 7, Number 4 (December 2016). Impact Factor: 0.42. Get it from: <http://tiny.cc/rrgviv>
- [j3] **Investigating the Privacy vs. Forwarding Accuracy Tradeoff in Opportunistic Interest-Casting.** G. Costantino, F. Martinelli, P. Santi. *IEEE Transactions on Mobile Computing*. Impact Factor: 2.28
- [j4] **A quality model for social networks populated with web services.** N. Faci, M. Petrocchi, G. Costantino, F. Martinelli, Z. Maamar. *Springer Journal of Service Oriented Computing and Applications, 2014*. Impact Factor: 1.658
- [j5] **Enhancing SPF MANET Routing with Energy Awareness.** G. Bella, G. Costantino, J. Crowcroft, S. Riccobene. *Journal Computer Standards & Interfaces*. Impact Factor: 0.825.
- [j6] **Evaluating the Device Reputation through Full Observation in MANETs.** G. Bella, G. Costantino, S. Riccobene. *Journal of Information Assurance and Security*. Impact Factor: 0.362.

*Conference Publications*

- [c1] **Trade-Off Analysis of Safety and Security in CAN bus communication.** L. Dariz, G. Costantino, M. Ruggeri, F. Martinelli, M. Selvatici. *5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS 2017)*. (ISBN): To appear.
- [c2] **Privacy-Preserving Text Mining as a Service.** G. Costantino, A. La Marra, F. Martinelli, A. Saracino, M. Sheikhalishahi. *The 22nd IEEE Symposium on Computers and Communications (ISCC 2017)*. (ISBN): To appear.
- [c3] **Analysis of Data Sharing Agreements.** G. Costantino, F. Martinelli, I. Matteucci e M. Petrocchi. *The 3rd International Conference on Information Systems Security and Privacy (ICISSP 2017)*. (ISBN): 978-989-758-209-7.
- [c4] **A Survey over Low-Level Security Issues in Heavy Duty Vehicles.** L. Dariz, M. Ruggeri, G. Costantino e F. Martinelli. *The 14th ESCAR Europe - The world's leading Automotive Cyber Security conference*. (ISBN): To appear.
- [c5] **Practical Privacy Preserving Medical Diagnosis using Homomorphic Encryption.** G. Costantino, S. Carpov, F. Martinelli, T. H. Nguyen, R. Sirdey. *The 9th IEEE International Conference on Cloud Computing (CLOUD 2016)*. (ISSN): 2159-6190. Get it from: <http://tiny.cc/8amejy>
- [c6] **A Lifecycle for Data Sharing Agreements: How it works out.** J. F. Ruiz, M. Petrocchi, I. Matteucci, G. Costantino, C. Gambardella, M. Manea, A. Ozdeniz. *Annual Privacy Forum (APF 2016)*. (ISBN): 978-3-319-44759-9. Get it from: <http://tiny.cc/aoybhv>
- [c7] **LoSeRO: A Locality Sensitive Routing Protocol in Opportunistic Networks.** G. Costantino, R. R. Maiti, F. Martinelli, P. Santi. *The 31st ACM Symposium On Applied Computing (SAC 2016)*. (ISBN): 978-1-4503-3739-7/16/04. Get it from: <http://tiny.cc/cgynay>
- [c8] **Exploiting Vehicles' Reputation to Mitigate DoS Attack.** G. Costantino, F. Martinelli, I. Matteucci. *The 4th International Conference on Model-Driven Engineering and Software Development (MODELSWARD 2016)*. (ISBN): 978-989-758-166-3. Get it from: <http://tiny.cc/ghynay>

- [c9] **Towards a Usage Control based Video Surveillance Framework.** E. Carniani, G. Costantino, F. Marino, F. Martinelli, P. Mori. *The 24th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP 2016)*. (ISBN): 978-1-4673-8776-7. Get it from: <http://tiny.cc/ljynay>
- [c10] **Location-based Routing for Opportunistic Networks.** G. Costantino, R. R. Maiti, F. Martinelli, P. Santi. *The 12th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS 2015)*. (ISBN): 978-1-4673-9101-6/15. Get it from: <http://tiny.cc/azynay>
- [c11] **Business Reputation of Social Networks of Web Services.** Z. Maamar, G. Costantino, M. Petrocchi, F. Martinelli. *The 12th International Conference on Mobile Systems and Pervasive Computing (MobiSPC 2015)*. (ISSN): 1877-0509. Get it from: <http://tiny.cc/rfmt9x>
- [c12] **Privacy-Preserving Energy-Reading for Smart Meter.** G. Costantino, F. Martinelli. *13th International Conference On Smart homes and health Telematics (ICOST 2015)*. (ISBN): 978-3-319-19312-0. Get it from: <http://tiny.cc/plmt9x>
- [c13] **Design and Development of a Facebook Application to Raise Privacy Awareness.** G. Costantino, D. Sgandurra. *23rd Euromicro International Conference on Parallel, Distributed and Network-based Processing (PDP 2015)*. (ISSN): 1066-6192. Get it from: <http://tiny.cc/dkmt9x>
- [c14] **Using Incentives to Analyze Social Web Services' Behaviors.** Z. Maamar, G. Costantino, M. Petrocchi, F. Martinelli. *The 7th International Workshop on Personalization and Context-Awareness in Cloud and Service Computing (PCS 2014)*. (ISSN): 0302-9743. Get it from: <http://tiny.cc/iqmt9x>
- [c15] **Improving Role-based Access to Android Applications with JCHR.** S. Bistarelli, G. Costantino, F. Martinelli, F. Santini. *The 3rd International Workshop on Security of Mobile Applications (IWSMA) 2014, The 3rd International Workshop*. (ISBN): 978-1-4799-4223-7. Get it from: <http://tiny.cc/87mt9x>
- [c16] **Privacy-Preserving Mobility-Casting in Opportunistic Networks.** G. Costantino, F. Martinelli, P. Santi. *Privacy, Security and Trust (PST) 2014, The Twelfth Annual International Conference*. (ISSN): 1525-3511. Get it from: <http://tiny.cc/kdnt9x>
- [c17] **Reputation-based Composition of Social Web Services.** A. Celestini, G. Costantino, R. De Nicola, Z. Maamar, F. Martinelli, M. Petrocchi, and F. Tiezzi. *28th International Conference on Advanced Information Networking and Applications (AINA 2014)*. (ISSN): 1550-445X. Get it from: <http://tiny.cc/n4ku9x>
- [c18] **Towards Enforcing On-The-Fly Policies in BYOD Environments.** G. Costantino, F. Martinelli, A. Saracino and D. Sgandurra. *Eighth International Conference on Information Assurance and Security (IAS 2013)*. (ISBN): 978-1-4799-2989-4. Get it from: <http://tiny.cc/z7ku9x>
- [c19] **How to Grant Less Permissions to Facebook Applications.** G. Costantino, F. Martinelli and D. Sgandurra. *Eighth International Conference on Information Assurance and Security (IAS 2013)*. (ISBN): 978-1-4799-2989-4. Get it from: <http://tiny.cc/osn0cy>
- [c20] **Are Photos On Social Networks Really Private?** G. Costantino, F. Martinelli, D. Sgandurra. *IEEE International Conference on Collaboration Technologies and Systems (CTS 2013)*. (ISBN): 978-1-4673-6403-4. Get it from: <http://tiny.cc/mdlu9x>
- [c21] **DEMO Session, An implementation of secure two-party computation for smartphones with application to privacy-preserving interest-cast.** G. Costantino, F. Martinelli, P. Santi. *MobiCom - The 18th Annual International Conference on Mobile Computing and Networking (MobiCom 2012)*. (ISBN): 978-1-4503-1159-5. Get it from: <http://tiny.cc/yglu9x>
- [c22] **An implementation of secure two-party computation for smartphones with application to privacy-preserving interest-cast.** G. Costantino, F. Martinelli, P. Santi. *The Tenth Annual International Conference on Privacy, Security and Trust (PST 2012)*. (ISBN): 978-1-4673-2323-9. Get it from: <http://tiny.cc/rilu9x>

- [c23] **A study on rating services based on users' categories.** G. Costantino, F. Martinelli, M. Petrocchi. *The Seventh International Conference on Internet and Web Applications and Services (ICIW 2012)*. (ISBN): 978-1-61208-200-4. Get it from: <http://tiny.cc/51lu9x>
- [c24] **Privacy-Preserving Interest-Casting in Opportunistic Networks.** G. Costantino, F. Martinelli, P. Santi. *IEEE Wireless Communications and Networking Conference (WCNC 2012)*. (ISNN): 1525-3511. Get it from: <http://tiny.cc/yplu9x>
- [c25] **Priorities-based Review Computation.** G. Costantino, F. Martinelli, M. Petrocchi. *AAAI SPRING SYMPOSIUM 2012*. (ISNN): 0738-4602. Get it from: <http://tiny.cc/6xlu9x>
- [c26] **Subjective Review-based Reputation.** G. Costantino, C. Morisset, M. Petrocchi. *The 27th ACM Symposium On Applied Computing (SAC 2012)*. (ISBN): 978-1-4503-0857-1. Get it from: <http://tiny.cc/y1lu9x>
- [c27] **Remote management of face-to-face written authenticated though anonymous exams.** G.Bella, G.Costantino, L. Coles-Kemp, S.Riccobene. *The International Conference on Computer Supported Education (CSEDU 2011)*. (ISBN): 978-989-8425-50-8. Get it from: <http://tiny.cc/bhmu9x>
- [c28] **WATA: A System for Written Authenticated Though Anonymous Exams.** G.Bella, G.Costantino, S.Riccobene. *The International Conference on Computer Supported Education (CSEDU 2010)*. (ISBN): 978-989-674-024-5. Get it from: <http://tiny.cc/jjmu9x>
- [c29] **Enforcing Collaboration in MANET Routing Protocols.** G.Bella, G.Costantino, S.Riccobene. *The Fifth International Conference on Wireless and Mobile Communications (ICWMC 2009)*. (ISBN): 978-1-4244-4679-7. Get it from: <http://tiny.cc/ukmu9x>
- [c30] **Managing Reputation over MANETs.** G.Bella, G.Costantino, S.Riccobene. *The Fourth International Conference on Information Assurance and Security (IAS 2008)*. (ISBN): 978-0-7695-3324-7. Get it from: <http://tiny.cc/wlmu9x>
- [c31] **Spreading of Reputation values in a Mobile Network.** G.Bella, G.Costantino, S.Riccobene. *Workshop on Information and Communication Technologies (SoftCOM 2008)*.

### Technical Report

- [t1] **Privacy-Preserving Mobility-Casting in Opportunistic Networks.** G. Costantino, F. Martinelli, P. Santi. *IIT TR-23/2013*. Get it from: <http://tiny.cc/9gzuy>
- [t2] **A Client-Aware Reputation System for e-Services.** G. Costantino, F. Martinelli, M. Petrocchi. *IIT TR-11/2011*. Get it from: <http://tiny.cc/5kzuay>

### Book Chapter

- [b1] **Privacy-Preserving Opportunistic Networking** del libro *Opportunistic Mobile Social Networks*. G. Costantino, F. Martinelli, P. Santi. *CRC Press - 2014*. Get it from: <http://tiny.cc/5uo7vx>

## Research Projects Involvement

- 1| **C3ISP:** Collaborative and Confidential Information Sharing and Analysis for Cyber Protection. Horizon 2020 Project.

*Duration:* October 2016 – September 2019 *On going*)

*Goal:* C3ISP mission is to define a collaborative and confidential information sharing, analysis and protection framework as a service for cyber-security management. C3ISP innovation is the possibility to share information in a flexible and controllable manner inside a collaborative multi-domain environment to improve detection of cyber-threats and response capabilities, still preserving the confidentiality of the shared information. C3ISP paradigm is collect, analyse, inform, and react.

*My activity:* I am WP leader of the ISP-pilot (WP2) that aims at collecting cyber-security information from ISP to discover cyber-security attacks and mitigate future ones. Also. I am involved in the WP1-Management and WP9 Exploitation, Dissemination, Communication and Standardization.

2| **Securing Smart Airports:** *ENISA Project*

*Duration:* February 2016 – September 2016

*Goal:* Delivering a document with the purpose of providing information and solutions to mitigate cyber-security attacks in the airport within the Member States of the European Community.

*My Activity:* I participated at the definition of the Good Practices that Europeans airports should consider to mitigate cyber attacks and at the definition of use cases that involve cyber-security attacks. In addition, I participated at the *Desktop Research* phase in which we identified contacts of people who work at European airports, with the aim of proposing a survey to know the major threat that can make a vulnerable Airports.

3| **Coco Cloud:** *FP7 Project*

*Duration:* October 2013 – October 2016

*Goal:* Coco Cloud aims at allowing the cloud users to securely and privately share their data in the cloud. This will increase the trust of users in the cloud services and thus increase their widespread adoption with consequent benefits for the users and in general for digital economy.

*My Activity:* I have been involved in the development and management components that are part of WP4 (Data-Sharing Policies) and WP6 (Infrastructure). In particular, in the WP4 I developed a web-service component that is able to identify policies conflicting policies. Instead in the WP6 I supervised and managed the Cloud infrastructure providing solutions for users authentication and data protection.

4| **HC@WORKS-2:** *ICT Digital*

*Duration:* January 2016 – December 2016

*Goal:* HC@WORKS-2 is a project that extends the results obtained in the project HC@WORKS. This new project aims to bridge the gap between the case studies developed in HC@WORKS and pointing in the construction of pre-products with the clear intention of the three industrial partners to integrate their products with the aim of reaching the market level in 2017/18.

*My Activity:* In the HC@WORKS2 project, I am extending the functionality of Cloud platform already implemented during HC@WORKS. In particular, I am managing and implementing the APIs that the Cloud will provide to clients and security issues that the entire Cloud infrastructure they might suffer.

5| **HC@WORKS:** *ICT Labs European Project*

*Duration:* January 2015 – December 2015

*Goal:* HC@WORKS project demonstrates the feasibility of embedding Homomorphic Encryption based privacy-preserving processing techniques by the development of three industrial pilots integrated in the product lines of their respective carriers: Thales CYBELS (cybersecurity), Atos CSG (eHealth) and ENGINEERING OPENNESS (IS3 Lab).

*My Activity:* In the project I was involved in the identification of functional requirements and non functional requirements for the communication architecture between Mobile and Cloud environment. In particular, the requirements took into account the need for security and privacy aspects required by the Homomorphic Encryption framework and the end-users. In addition, I participated in the development of the communication infrastructure between Client and Cloud devices, providing APIs that allowed clients to interact with the cloud to submit private data of users to be processed through the homomorphic cryptosystem schema. Finally, I developed solution to mitigate cyber-security threat into the cloud.

6| **Smart Campus**

*Duration:* January 2014 – December 2015

*Goal:* this is the project "Energy from Renewable Sources and ICT for energy sustainability" funded by the "Department of engineering, ICT and technologies for energy and transport (DIITET)". The goal of the project is to make the CNR-Area Smart through the installation of solar panels, security cameras, sensors for parking lots, fast internet access, touch screen totems, balance and management of 'consumed energy.

*My Activity:* I participated in the implementation and supervision of an integrated video surveillance with an access-control system. In particular, together with my colleagues of the Security group, I designed and developed a framework to monitor relevant buildings area, which allow the identification of users through facial recognition and then continuous monitoring of users' actions to check that those were compliant with the access policies.

7| **Secure!** - Smart Platform based on crowdsourcing and crowdsensing technologies for safety, crises and emergencies management - *Regional Project.*

*Duration:* January 2013 – March 2015

*Goal:* Secure! is a project funded by the Tuscany Region aiming at managing and discovering dangerous situations that may happen in public places. Secure! works by collecting information from Social Networks, websites or/and users registered to the Secure! platform.

*My Activity:* In the project, I was in charge of securing the entire architecture. In fact, hardening the architecture blocks is a fundamental step to avoid attacks from malicious users. Attacks range from the classical external intrusion to the fake information spreading. To protect project components from external attacks, I created and managed APIs using RESTful-services with SSL support, firewall, Intrusions detection System (IDS), Antivirus and set-up Virtual-Machines that fulfil all security requirements. Moreover, I have worked at the implementation of a reputation systems to protect the architecture from fake messages spreading.

8| **NESSOS:** Network of Excellence on Engineering Secure Future Internet Software Services and Systems. *FP7 European Project.*

*Duration:* October 2010 – March 2014

*Goal:* The Network of Excellence on Engineering Secure Future Internet Software Services and Systems (NESSoS) aims at constituting and integrating a long lasting research community on engineering secure software-based services and systems.

*My Activity:* I carried out a deep analysis on security, privacy and trust issues on mobile systems, cloud and social networks. In particular, I faced problems on trusting for web-service, as well as on the Social Web-Service; on the security front, I studied and proposed technologies to protect servers from external attack systems. Regarding privacy aspects, I worked on Online Social Networks finding vulnerabilities that affect the privacy of traditional users.

9| **Trust in the Cloud.** *ICT Labs European Project*

*Duration:* January 2013 – December 2013

*Goal:* Trust in the Cloud aimed at bringing trust aspects into the Cloud by assuring that all data that travel across the cloud are not accessed by unauthorised people.

*My Activity:* My contribute was to create a client-server communication in which users authentication and authorization were exploited by means of certificates written with the RTML language (Role-based Trust-management Markup Language). Server-side, a RTML parser and a signature verification, which a personally developed, was developed to verify the authentication and authorization of users.

## Conference and Seminar Presentations

- 1| ICISSP 2017, The International Conference on Information Systems Security and Privacy, February 2017.

- 2| APF 2016, Annual Privacy Forum 2016, September 2016.
- 3| SAC 2016, The 31st ACM Symposium On Applied Computing (SAC 2016), April 2016.
- 4| PDP 2016, International Conference on Parallel, Distributed and Network-based Processing, February 2016.
- 5| ICOST 2015, International Conference On Smart homes and health Telematics, June 2015.
- 6| PDP 2015, International Conference on Parallel, Distributed and Network-based Processing, March 2015.
- 7| Workshop of Cyber Security Technological District, November 2014.
- 8| WISE 2014, at the International Workshop on Personalization and Context-Awareness in Cloud and Service Computing (PCS), October 2014
- 9| PST 2014, Privacy, Security and Trust (PST), Twelfth Annual International Conference, July 2014.
- 10| AINA 2014, 28th International Conference on Advanced Information Networking and Applications, May 2014.
- 11| IAS 2013, Ninth International Conference on Information Assurance and Security, December 2013.
- 12| MobiCom 2012, The 18th Annual International Conference on Mobile Computing and Networking, August 2012.
- 13| PST 2012, Privacy, Security and Trust (PST), Tenth Annual International Conference, July 2012.
- 14| ICIW 2012, The Seventh International Conference on Internet and Web Applications and Services, May 2012.
- 15| WCNC 2012, IEEE Wireless Communications and Networking Conference, April 2012.
- 16| AAAI 2012 Spring Symposia, Intelligent Web Services Meet Social Computing, March 2012.
- 17| CSEDU 2010, The International Conference on Computer Supported Education, April 2010.
- 18| ICWMC 2009, The Fifth International Conference on Wireless and Mobile Communications, August 2009.
- 19| IAS 2008, The Fourth International Conference on Information Assurance and Security, September 2008.
- 20| miniWorkshop on Security Frameworks, University of Catania, Edition: 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015

## Journal Reviewer

- 1| IEEE Transactions on Information Forensics & Security, ISSN: 1556-6013
- 2| IEEE Transactions on Mobile Computing, ISSN: 1536-1233
- 3| Ad Hoc Network Journal, ISSN: 1570-8705
- 4| Computer Network Journal, ISSN: 1389-1286
- 5| Security And Communication Networks Journal. ISSN: 1939-0122
- 6| Pervasive and Mobile Computing Journal, ISSN: 1574-1192.
- 7| IEEE Transactions on Parallel and Distributed Systems Journal. ISSN: 1045-9219
- 8| Service Oriented Computing and Applications Journal, ISSN: 1863-2394.
- 9| International Journal of Information Security, ISSN: 1615-5262 and 1615-5270



## Conference Reviewer

- 1| IFIP SEC 2017, The 32st International Conference on ICT Systems Security and Privacy Protection, May 2017.
- 2| ESORICS 2017, European Symposium on Research in Computer Security, September 2017.
- 3| FMICS-AVoCS, International Workshop on Formal Methods for Industrial Critical Systems and Automated Verification of Critical Systems, September 2017.
- 4| ICIW 2017, The Twelfth International Conference on Internet and Web Applications and Services. June 2017.
- 5| SECURWARE 2017, The Eleventh International Conference on Emerging Security Information, Systems and Technologies September 2017.
- 6| Telerise 2017, International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, September 2017.
- 7| ICISSP 2017, The International Conference on Information Systems Security and Privacy, February 2017.
- 8| ITA-SEC. The Italian Conference on Cybersecurity, January 2017.
- 9| ESORICS 2016, European Symposium on Research in Computer Security, September 2016.
- 10| IFIP SEC 2016, The 31st International Conference on ICT Systems Security and Privacy Protection, May 2016.
- 11| CLaw 2016, The IEEE 2nd Workshop on Legal and Technical Issues in Cloud Computing and Cloud-Supported Internet of Things, April 2016.
- 12| CODASPY 2016, The 6th ACM Conference on Data and Application Security and Privacy, March 2016.
- 13| NSS 2015, The 9th International Conference on Network and System Security.
- 14| TrustCom 2015, The 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications.
- 15| SmartGridComm, IEEE International Conference on Smart Grid Communications, November 2014.
- 16| ICIW 2014, The Ninth International Conference on Internet and Web Applications and Services, July 2014.
- 17| CSS 2014, The 6th International Symposium on Cyberspace Safety and Security, August 2014.
- 18| SAC 2013, The 27th Symposium On Applied Computing, March 2013.
- 19| PST 2013, International Conference on Privacy, Security and Trust (PST), July 2013.
- 20| NSS 2013, The 7th International Conference on Network and System Security, June 2013.
- 21| ICIW 2013, The Eighth International Conference on Internet and Web Applications and Services, June 2013.
- 22| CRITIS 2013, 8th International Conference on Critical Information Infrastructures Security, September 2013.
- 23| CECNET 2013, The Third International Conference on Consumer Electronics, Communications and Networks, November 2013.
- 24| SAC 2012, Welcome to the 27th Symposium On Applied Computing, March 2012.
- 25| CSS 2012, The 4th International Symposium on Cyberspace Safety and Security, December 2012.
- 26| WISTP 2011, Security and Privacy of Mobile Devices In Wireless Communication, June 2011.

- 27| TrustBus 2011, International Conference on Trust, Privacy & Security in Digital Business, August 2011.
- 28| SECURE 2011, International Conference on Security and Cryptography, July 2011.
- 29| NSS 2011, The 5th International Conference on Network and System Security, September 2011.
- 30| MOBISEC 2011, 3rd International ICST Conference on Security and Privacy in Mobile Information and Communication Systems, May 2011.

## Conference Program Committee

- 1| ICIW 2017, The Twelfth International Conference on Internet and Web Applications and Services. June 2017.
- 2| SECURWARE 2017, The Eleventh International Conference on Emerging Security Information, Systems and Technologies September 2017.
- 3| Telerise 2017, International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, September 2017.
- 4| ICISSP 2017, The International Conference on Information Systems Security and Privacy, February 2017.
- 5| Telerise 2016, 2nd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, June 2016.
- 6| ICIW 2016, The International Conference on Internet and Web Applications and Services, May 2016.
- 7| TrustCom 2015, The 14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications, August 2015.
- 8| ICIW 2015, The Tenth International Conference on Internet and Web Applications and Services, June 2015.
- 9| ICIW 2014, The Ninth International Conference on Internet and Web Applications and Services, July 2014.
- 10| ICIW 2013, The Eighth International Conference on Internet and Web Applications and Services, July 2014.

## Summer Schools

- 1| SWING 2011, International School on Security of Wireless Networking, Bertinoro, Italy, 30 October 2011 to 04 November 2011.
- 2| IFIP WG 11.11, International School on Trust Management, DTU, Copenhagen, 20 - 24 June 2011.
- 3| ETISS, 5th European Trusted Infrastructure Summer School - Royal Holloway University of London, 05 - 10 September 2010.
- 4| Lipari School on Computer Science - The 31st Jacob T. Schwartz International School for Scientific Research, 17 - 24 July 2010.
- 5| GLOBAN 2008, University of Warsaw, 22 - 26 September 2008.
- 6| FOSAD 2007 - Bertinoro, 09 - 15 September 2007.

## Teaching

### *Cyber-security Master*

- 1| *Subject:* Mobile and cloud security  
*Institution:* University of Pisa and Institute of Informatics and Telematics - CNR  
*Total hours :* 6  
*Period:* September 2017
- 2| *Subject:* Laboratory of secure application development (network, mobile,cloud)  
*Institution:* University of Pisa and Institute of Informatics and Telematics - CNR  
*Total hours :* 14  
*Period:* October 2017

### *University Of Catania*

- 1| *Subject:* Web Programming  
*University:* University of Catania  
*Total hours :* 6  
*Other info:* Main Professor: Prof. Ing. Riccobene Salvatore (riccobene@dmi.unict.it)
- 2| *Subject:* Sicurezza Informatica - Laboratory  
*University:* University of Catania  
*Total hours :* 8  
*Other info:* Main Professor: Prof. Bella Giampaolo (giamp@dmi.unict.it)

## Advising

- 1| Software Engineers for group projects (2014, IIT-CNR, Pisa).
- 2| ERCIM Post-Doc Researcher (2014-2015, IIT-CNR, Pisa).
- 3| Graduate Student (2012, IIT-CNR, Pisa).
- 4| Graduate Students (2007-2010, Dep. Informatics and Mathematic, University of Catania).

## Knowledge and Skills

*Security:* Confidentiality and Data Integrity, Identity Management, Biometric Identification, Firewall Configuration, Intrusion Detection System, Data-logging for real-time analysts, Security alerts, Antivirus.

*Privacy:* Secure-Two Party Computation, Homomorphic Encryption, Access Control, Data-Sharing Policies.

*Trust:* Reputation Systems, Role-Based Language.

*Networking:* wired and wireless communication, TCP/IP Protocols, Encrypted Protocols: SSL/TLS, SSH, SFTP.

*Server Configuration:* VMware vSphere Esxi, VMware vSphere Client, Backup Tools.

*Database:* MySQL, PostgreSQL, SQL language.

*Programming Languages:* Pascal, Delphi, JAVA, JAVA for Android, C, C++, Unix Shell.

*Scripts language:* Python, HTML, PHP, JavaScript, TCL, OTCL.

*Spreadsheet and presentation softwares:* LaTeX, Microsoft Word, Pages, OpenOffice, Excel, Numbers, Keynote, Powerpoint.

## Other training experience

Building a Successful International Research Career Training Workshop, Trippenhuis, Amsterdam, January 2011

## Languages Spoken

### 1| *Italian*

Level: Mother tongue.

### 2| *English*

Level: Advanced - C1. I attended five-months course organised by the International House School for the CNR in 2014, 2013, 2012, 2011 and I got a certificate for level 6.

Level: Upper-Intermediate B2. I got a certificate at the BELL English School in Cambridge (UK). I successfully completed 5 weeks language course from 31 August 2009 to 02 October 2009. Level: Upper-Intermediate B2

Level: B1 PET (Preliminary English Test), June 2007.