Curriculum Vitae et Studiorum

Personal Data

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Bibliometric data (last update: June 25, 2019)

- h-index Google Scholar: *18*
- h-index Google Scholar from 2014: *15*
- i10 index Google Scholar: *27*
- i10 index Google Scholar from 2014: *20*
- # Citations Google Scholar: *1102*
- # Citations from 2014 Google Scholar: *799*
- Google Scholar page: https://goo.gl/HOu4BL
- h-index Scopus: *14*
- # citations Scopus: *559*

Education

- "Laurea" degree in "Ingegneria delle Telecomunicazioni", University of Pisa, School of Engineering, October 27, 1999 (final degree 105/110);
- Ph.D in Information Engineering, University of Pisa, School of Engineering, May 12, 2005.

Research group and thematic macro areas
I belong to the Trustworthy and Secure Future Internet group of the Institute of Informatics and Telematics of the CNR in Pisa, Italy. The macro themes of my research are the following:

- Models and methods for evaluating the quality and credibility of information available online: Online data quality and trustworthiness (from 2012 to current day)
- Models and methods for characterizing and analyzing online behaviors: Online behavioral models and analyses (from 2012 to current day)
- Technical and legal aspects of data privacy (from 2008 to current day)
- Formal methods and tools for analyzing security protocols - (from 2000 to current day)

Permanent and temporary contracts, as researcher

- 1 February 2010 - Current day. Permanent Researcher at Institute of Informatics and Telematics (IIT) - CNR, Pisa.
- 30 December 2005 - 31 January 2010. Researcher with temporary position (Ricercatore a tempo determinato - chiamata diretta ai sensi dell'Art.23 del D.P.R. 171/91. Delega del Presidente del CNR, Prot.n.7035, del 29 Dicembre 2005.) at Institute of Informatics and Telematics (IIT) - CNR, Pisa. Duration of the contract 30 December 2005 - 29 December 2010.

Other research grants and Ph.D. course

- Oct. 2000 – Oct. 2001 Scolarship holder ("borsista") at "Istituto per le Applicazioni Telematiche (IAT)" - Consiglio Nazionale delle Ricerche (CNR), Pisa, Italy. Topics: "Data security, authentication, and integrity". Tutor: Eng. Anna Vaccarelli. Call IAT 126.222.BO.1.

- Oct. 2001 – Oct. 2005 Research fellow ("assegnista di ricerca") at "Istituto di Informatica e Telematica (IIT)" - CNR, Pisa, Italy. Topics: "Analisi formale di meccanismi di sicurezza per l'accesso alle risorse in sistemi informatici". Tutor: Eng. Anna Vaccarelli. Call IAT 09-2001, 10/08/2001.

- Jan. 2002 – May 2005 Ph.D. Student (XVII cycle), Information Engineering, University of Pisa. CV: "Architettura dei Sistemi di Elaborazione". Tutors: Prof. Nicoletta De Francesco, Eng. Anna Vaccarelli, Prof. Gigliola Vaglini.

- Dec. 2005 "Contrattista d'opera, con contratto di prestazione d'opera ai sensi dell'art. 89", at "Istituto di Informatica e Telematica (IIT)" - CNR, Pisa, Italy, topics: "Secure electronic transactions" (aut. pres. CNR posiz. 0005502, 29/11/2005, prot.n.5316/05 5/12/2005).

- Dec. 1999 – Oct. 2000 Software engineer at "IDS Ingegneria dei Sistemi", Pisa, Italy ("contratto di collaborazione coordinata e continuativa").

Guest Scolarship From November 2013, I am a guest scholar at IMT (Institutes, Markets, and Technologies) Scuola Alti Studi, Lucca. The scolarship is renewed annually. The last assignment is effective till January 31, 2022. I collaborate with the System Modeling and Analysis group (SysMA) directed by Prof. Rocco De Nicola, for the analysis of data from social networks, the detection of fake news and fake social accounts.

Scientific Boards I am member of the scientific board for PhD Program in Cognitive and Cultural Systems @ IMT Scuola Alti Studi Lucca. The board is coordinated by the Director of the IMT School and responsible for course coordination and the management of students' progression through the key steps of programs. https://www.imtlucca.it/en/phd-programs/scientific-boards

Public competitions I participated in the following public competitions, with the following results:

- **Eligibility as Associate Professor**, achieved in August, 2018, validity: till August, 2024. Scientific Area: "Computer Science".

- **Eligibility as Associate Professor**, achieved in July, 2018, validity: till July, 2024. Scientific Area: "Information Engineering".

- **Eligibility as Senior Researcher**, achieved in 2009: Public competition, based on CV and interview, for the recruitment of 5 permanent positions as Senior Researchers, at the National Research Council. CNR call n. 364.15, Scientific Area " Computer Science ", Reference code: PI44/1, Topic: Information security, methods and tools for the security analysis of complex systems, access control in distributed systems. **I turned out to be suitable for the position and I ranked fourth in the ranking of merit**. The ranking was approved with the CNR measure n. 0019742, dated 2 March 2009.

- Public competition, based on CV and written and oral tests, for the recruitment of 98 personnel units, with permanent position, as Researcher, at the National Research Council. CNR call n. 364.13, (Prot. CNR 491, of 29/01/2007), Reference code: TO29/1, subject: Communication networks and advanced SW systems. I turned out to be suitable for the position and I ranked sixth in the final ranking.

Maternity leave

- Mandatory period: from May 21, 2010 to November 6, 2010.

- Optional period: from November 6, 2010, to January 10, 2011 (with one day/week attendance at work)

Participation in research projects. Below, a list of the research projects that I have participated in over the years.

Broadly speaking, the activities concern

- the preparation of the project proposal, with physical meetings and conference calls with the project partners, for defining its structure and contents;

- the writing of the project deliverables, as requested by the European Commission;

- the internal review of such deliverables;

- the participation to the technical meetings with the other partners of the consortium (my participation is proved by the attendance sheet that all the meeting participants must sign);

- the participation to the periodic conference calls;

- the participation to the official review meeting (my participation is proved by the attendance sheet that all the review meetings participants must sign); I participated to

  - First Consequence Review meeting, Feb. 2009, Bruxelles;

  - Second Consequence Review meeting, Feb. 2010, Abingdon;

  - First Coco Cloud Review meeting, June 15, 2015, Bruxelles;

  - Second and Final Coco Cloud Review meeting, December 15, 2016, Madrid.

- **European projects**

  1. Start date: January 1, 2006. Duration: 48 months: FP6-027748 Bionets (*BIOlogically inspired NETwork and Services*).

     - Topics: Bionets intends to create and develop new communication paradigms in the ICT sector, inspired by biological and resilient models.

     - Website: www.bionets.eu

     - Partners: CREATE-NET (coordinator); Consiglio Nazionale delle Ricerche - Pisa; University of Trento; Technion; University of Basel; Technische Universitaet Berlin; Institute of IT-Security and Security Law at the University of Passau; Budapest University of Thechnologie and Economics; Nokia Corporation; Valtion Teknillinen Tutkimuskeskus; Institut National de Recherche en Informatique et Automatique; National and Kapodistrian University of Athens; Telecom Italia; London School of Economics and Political Science; Sun Microsystems Iberica SA.

     - My role: **Representative** (affiliated to the National Research Council - Pisa) for the area of models and analysis of security protocols inspired by biological and resilient paradigms. In particular, I defined and implemented the *cryptofraglets* model, to formalize protocols and analyze their properties according to a computational model in which the actors of the protocol react as chemical reactions, adding suitable cryptographic primitives, to guarantee the security of communications. I report the following list of scientific work, which I co-authored and which are related to the Bionets project:

       * Fabio Martinelli, Marinella Petrocchi: Executable Specification of Cryptofraglets in Maude for Security Verification. BIONETICS 2009: 11-23 2008

       * Fabio Martinelli, Marinella Petrocchi: Signed and Weighted Trust Credentials in Fraglets. BIONETICS 2008: 7 2007

       * Fabio Martinelli, Marinella Petrocchi: Access Control Mechanisms for Fraglets. BIONETICS 2007: 101-104 2006

       * Marinella Petrocchi: Crypto-fraglets: networking, biology and security. BIONETICS 2006: Articolo n. 24

     - Documents showing my participation in Bionets:

       * Bionets D4.2: Towards Security in BIONETS. Online: http://www.bionets.eu/docs/BIONETS_D4_2.pdf.

       * Bionets ID4.6: Report on formal modeling and automated verification methods (internal deliverable). Online: http://www.iit.cnr.it/staff/marinella.petrocchi/ID4.6.pdf

       * D4.4 Adaptive Security in BIONETS. http://www.bionets.eu/docs/BIONETS_D4.4.pdf.

       * Bionets D4.5: Identities, Authentication, Trust, and Reputation in BIONETS. http://www.bionets.eu/docs/BIONETS_D4.5.pdf.

2. Sept. 1, 2005 - Aug 31, 2009: FP6-IST-3-016004 SENSORIA (*Software Engineering for Service Oriented Overlay Computers*).
   - Topics: Sensoria intends to develop a new approach to the engineering of software systems, in which foundational theories, techniques and methodologies are fully integrated, through a pragmatic approach to software engineering.
   - Website: http://www.sensoria-ist.eu/
   - Partners: LMU Monaco (Coordinator), Università di Bologna, ATX Software, Consiglio Nazionale delle Ricerche, DTU Denmark, FAST Software technologies, Università di Lisbona, Imperial College, S&N AG, Telecom Italia, Università di Edimburgo, Università di Firenze, Università di Pisa, Università di Trento, Università di Varsavia, UCL, Università di Leicester.
   - My role: **Representative** (affiliated to the National Research Council) for the definition, model and analysis of authentication protocols in the mobile and web environment, in collaboration with ISTI-CNR colleagues and Telecom Italia colleagues. The following works are related to the project:
     * Maurice H. ter Beek, Stefania Gnesi, Fabio Martinelli, Franco Mazzanti, Marinella Petrocchi: Formal Modelling and Verification in Service-Oriented Computing. ERCIM News 2007(70) (2007)
     * Maurice H. ter Beek, Corrado Moiso, Marinella Petrocchi: Towards Security Analyses of an Identity Federation Protocol for Web Services in Convergent Networks. AICT 2007: Articolo n. 31

3. Jan 1, 2008 - Feb 28, 2011: FP7-214859 CONSEQUENCE (*Context-aware Data-centric Information Sharing*).
   - Topics: Consequence intends to provide an integrated data protection framework, which is centered on the type of data to be memorized and / or shared, which is aware of the context, and which is based on electronic contracts - called data sharing agreements - regulating data sharing.
   - Website: www.consequence-project.eu
   - Partners: European Microsoft Innovation Center (Coordinator), Consiglio Nazionale delle Ricerche - Pisa, Imperial College, Hewlett Packard Italiana, Create-Net, Scientific and Technology Facilities Council, BAE Systems
   - My role: **Representative** (affiliated to the National Research Council - Pisa) for the area of definition and analysis of data sharing agreements, electronic contracts for the controlled sharing of personal and non-personal data. In particular, I was co-creator of the CNL4DSA controlled natural language, which allows for the user-friendly writing (and the subsequent automatic analysis) of data protection policies. I report the following scientific works, which I co-authored, related to the Consequence project:
     * Ilaria Matteucci, Marinella Petrocchi, Marco Luca Sbodio: CNL4DSA: a controlled natural language for data sharing agreements. SAC 2010: 616-620
     * Ilaria Matteucci, Marinella Petrocchi, Marco Luca Sbodio, Luca Wiegand: A Design Phase for Data Sharing Agreements. DPM/SETOP 2011: 25-41
     * Ilaria Matteucci, Paolo Mori, Marinella Petrocchi, Luca Wiegand: Controlled data sharing in E-health. STAST 2011: 17-23
   - Documents showing my participation in Consequence:
     * Consequence D1.1: First Version of Consequence Architecture. Available on line: http://www.consequence-project.eu/Deliverables_Y1/D1.1.pdf. January 2009.
     * Consequence D2.1: Methodologies and tools for data sharing agreements infrastructure. Available on line:
       http://www.consequence-project.eu/Deliverables_Y1/D2.1.pdf. January 2009.
     * Consequence D1.2: Second Version of Consequence Architecture. Available on line: http://www.consequence-project.eu/Deliverables_Y2/D1.2.pdf. January 2010.

4. Start date: August 1, 2010. Duration: 42 months. FP7-257930 ANIKETOS (*Ensuring Trustworthiness and Security in Service Composition*).
   - Topics: Aniketos intends to support the user with dynamic and transparent solutions to invoke web services, even in terms of composition, satisfying criteria of availability, quality, and security.

- Website: http://www.aniketos.eu/
- Partners: Athens Technology Center SA, Atos, DAEM S.A.-City of Athens IT Company, DeepBlue, SELEX Elsag, The National Research Council of Italy, Italtel Liverpool John Moores University, SAP, Security Evaluation Analysis and Research Lab Ltd, Stiftelsen SINTEF, Tecnalia, Thales, Waterford Institute of Technology, University of Trento, /University of Salzburg, Wind Telecomunicazioni S. P. A.
- My role: **Representative** (affiliated to the National Research Council of Italy) for the area of reputation systems for online services and definition of metrics to quantify the quality of web services. I report a scientific work that I co-authored, on reputation systems for online services, within the Aniketos project:
  * Gianpiero Costantino, Fabio Martinelli, Marinella Petrocchi: Priorities-Based Review Computation. AAAI Spring Symposium: Intelligent Web Services Meet Social Computing 2012
- Deliverables to which I contributed in the Aniketos project:
  * Aniketos D2.1: Models and methodologies for embedding and monitoring trust in services. Online: http://www.aniketos.eu/deliverables
  * Aniketos D1.3: Initial version of the socio-technical security modelling language and tool. Online:
    http://www.aniketos.eu/sites/default/files/downloads/D1.3-Final-Approved.pdf

5. 1 Ottobre 2010 - 31 Marzo 2014: FP7-256980 NESSOS (*Network of Excellence on Engineering Secure Future Internet Software and Systems*).
   - Topics: The Nessos Network of Excellence aims to establish and integrate a lasting research community on the topics of the engineering of secure software systems.
   - Website: http://www.nessos-project.eu/
   - Partners: Consiglio Nazionale delle Ricerche (Coordinatore), Atos S.A.E., Eidgenossische Technische Hochschule Zurich, Fundacion IMDEA Software, Institut National de Recherche en Informatique et en Automatique, Katholieke Universiteit Leuven, Ludwig-Maximilians-Universitat Munchen, Siemens AG, Stiftelsen Sintef, University Duisburg-Essen, Universidad de Malaga, Università degli studi di Trento
   - My role: **Representative** for scientific activities and **Co-manager** for organizational tasks. In particular, being the IIT-CNR coordinator of this network of excellence, a part of the activity concerned the internal review of all deliverables to be submitted to the EU reviewers, the webpage maintainance, the creation of advertising gadgets, such as flyers and project brochures, the writing of the Nessos Quality Plan. For the scientific aspect, I contributed to the realization of a business process orchestrator that guarantees security properties in the composition of these processes and I contributed to the creation of a data protection framework for a case study of personalized medicine. In addition, I collaborated on the upgrade of the PaMoChSA analysis tool, for the automatic formal verification of security properties in communication protocols.
   - Scientific articles showing my participation in Nessos:
     * Ciancia, V., Martin, J., Martinelli, F., Matteucci, I., Petrocchi, M., Pimentel, E. (2014). Automated Synthesis and Ranking of Secure BPMN Orchestrators. International Journal of Secure Software Engineering (IJSSE), 5(2), 44-64. doi:10.4018/ijsse.2014040103
     * Vincenzo Ciancia, Fabio Martinelli, Ilaria Matteucci, Marinella Petrocchi, J. A. Martin, Ernesto Pimentel: Automated Synthesis and Ranking of Secure BPMN Orchestrators. ARES 2013: 455-464

6. October 1, 2010 - January 31, 2014: FP7-ICT-257438 CONTRAIL (*Open computing Infrastructures for elastic Services*).
   - Topics: Contrail intends to develop a series of software tools, open source, to support cooperation and sharing of resources in federations of cloud systems.
   - Website: http://contrail-project.eu/
   - Partners: Institut National de Recherche en Informatique et en Automatique (Coordinator), CNR - Italian National Research Council, Genias Benelux, Constellation Technologies, Hewlett Packard Italiana SRL, Science and Technology Facilities Council, Tiscali Italia SpA, Vrije Universiteit Amsterdam, XLAB, Konrad-Zuse-Zentrum fr Informationstechnik Berlin, Linagora.

- My Role: **Representative** (affiliated to CNR - Italian National Research Council) - for the area of formal analysis of the security protocols defined and implemented within the project itself.
- Documents showing my participation in Contrail:
  * Contrail Deliverable D7.1: Security Requirements, Specification and Architecture for Virtual Infrastructures, March 23rd, 2011. Available online:
    http://contrail-project.eu/documents/18553/136157/D7.1.pdf
  * Contrail Deliverable D7.3: Revised Specification and Architecture of Security for Virtual Infrastructures, July 17, 2012. Available online:
    http://contrail-project.eu/documents/18553/136157/D7.3.pdf

7. November 1, 2013 - October 31, 2016: FP7-610853 COCO CLOUD (*Confidential and Compliant Clouds*).
   - Topics: Coco Cloud defines and develops an ICT infrastructure to allow to cloud users a secure and private sharing of their data in the cloud.
   - Website: http://www.coco-cloud.eu/
   - Partners: Hewlett Packard Italiana (Coordinatore), Consiglio Nazionale delle Ricerche, Quiron Salud, SAP, Imperial College, University of Oslo, Bird & Bird, Atos, Agenzia per l'Italia Digitale
   - My role: **Work Package leader of WP4**, on the Data Sharing Agreements infrastructure. For the three-year duration of the project, I coordinated the activity of WP4, including: the creation of an authoring tool to create electronic contracts known as Data Sharing Agreements; a tool for analyzing and resolving conflicts for the data protection policies contained in the agreement; the mapping of the contract from a semi-controlled natural language to a format that can be interpreted by WP5, the Work Package concerning the enforcement of the agreement. I am the editor of the three deliverables of WP4, on the Data Sharing Agreements Infrastructure. With the activities carried out in this project, I refined my knowledge in the field of legal aspects of data protection, with particular reference to European data protection regulations and the new GDPR (General Data Protection Regulation) regulation, adopted on 27 April 2016 and applied from 25 May 2018. Some scientific papers I co-authored as part of the Coco Cloud project:
     * Jose Fran. Ruiz, Marinella Petrocchi, Ilaria Matteucci, Gianpiero Costantino, Carmela Gambardella, Mirko Manea, Anil Ozdeniz: A Lifecycle for Data Sharing Agreements: How it Works Out. Annual Privacy Forum 2016: 3-20
     * Marco Casassa Mont, Ilaria Matteucci, Marinella Petrocchi, Marco Luca Sbodio: Towards safer information sharing in the cloud. Int. J. Inf. Sec. 14(4): 319-334 (2015)
     * Claudio Caimi, Carmela Gambardella, Mirko Manea, Marinella Petrocchi, Debora Stella: Legal and Technical Perspectives in Data Sharing Agreements Definition. Annual Privacy Forum 2015: 178-192
     * Marina Egea, Ilaria Matteucci, Paolo Mori, Marinella Petrocchi: Definition of Data Sharing Agreements - The Case of Spanish Data Protection Law. A4Cloud 2014: 248-272
   - Documents showing my participation in Coco Cloud (my leadership of WP4 is reported in the deliverables):
     * Coco Cloud Deliverable D4.1 (November 2014): DSA specifications, methodologies and techniques. Available online: http://www.coco-cloud.eu/content/d41-dsa-specifications-methodologies-and-techniques
       http://contrail-project.eu/documents/18553/136157/D7.1.pdf
     * Coco Cloud Deliverable D4.2 (November 2015): First DSA Management Infrastructure. Deliverable internal to the consortium. Available online the frontmatter:
       www.iit.cnr.it/staff/marinella.petrocchi/CocoCloud4.2.png
     * Coco Cloud Deliverable D4.3 (October 2016): Final DSA Management Infrastructure. Deliverable internal to the consortium. Available online the frontmatter:
       www.iit.cnr.it/staff/marinella.petrocchi/CocoCloud4.3.png

8. Sept. 1, 2014 - Dec. 31, 2015 and January 1, 2016 - December 31, 2016: EIT Digital High Impact Initiative 14605 TRUSTED DATA MANAGEMENT WITH SERVICE ECOSYSTEM
   - Topics: the project aims to provide providers and consumers with tools and services 1)

to improve the control of their personal and sensitive data, and 2) customized to specific needs of the individual and the company.

- Website: http://www.iit.cnr.it/node/30703
- Consorzio: Imperial College London, Telecom Italia, Consiglio Nazionale delle Ricerche, Digital Catapult, Ericsson, F-Secure, British Telecom, Trento RISE, Aalto-korkeakoulusaatio, Institut Mines-Telecom, Thales Comm and Security SAS, Politecnico di Milano
- My role: **Representative** (affiliated to the National Research Council) for the definition of a data protection system based on privacy policies, oriented to the management of so-called "Multi-subject Personal Data", data that are stored on the personal device of a individual, but on which more individuals have rights of access and use (think, for example, to a picture, in which more individuals are present). The developed system allows the configuration of the access rules to the data, in order to satisfy the constraints of all the entities involved.The activity was carried out in collaboration with Telecom Italia, acting directly on the Telecom Personal Data Store. Inherent work is the following:
  * Stefania Gnesi, Ilaria Matteucci, Corrado Moiso, Paolo Mori, Marinella Petrocchi, Michele Vescovi: My Data, Your Data, Our Data: Managing Privacy Preferences in Multiple Subjects Personal Data. In *Privacy Technologies and Policy*, Volume 8450 of the series Lecture Notes in Computer Science, pp 154-171, 2014.

  I co-presented the results of the project at the EIT Digital Italian Innovation Day, held at the Trento node, on December 10, 2015:
  https://www.eitdigital.eu/news-events/events/article/eit-digital-italian-innovation-day/

9. February 2, 2015 - February 1, 2017: JUST2013 / ISEC / DRUGS / AG / 6414 Cassandra (*Computer Assisted Solutions for Studying the Availability aNd DistRibution of novel psychoActive substances*).
   - Topics: Cassandra intends to investigate the spread of the so-called Smart Drugs (Novel Psychoactive Substances - NPS), incorporating innovative tools for network information mining and social indicators, such as the engagement of influencers on the network, and the content of posts on specialized sites.
   - Website: http://www.projectcassandra.eu/
   - Partners: King's College (Coordinator), Consiglio Nazionale delle Ricerche, Waterford Institute of Technology (WIT)
   - My role: **Co-investigator** (affiliated to the National Research Council) for the analysis of data crawled by 1) forums specialized in discussions on smart drugs, 2) Twitter and 3) online stores. Some scientific papers I co-authored as part of the Cassandra project:
     * Fabio Del Vigna, Marco Avvenuti, Clara Bacciu, Paolo Deluca, Marinella Petrocchi, Andrea Marchetti, Maurizio Tesconi: Spotting the Diffusion of New Psychoactive Substances over the Internet. Intelligent Data Analysis 2016: 86-97
     * Fabio Del Vigna, Marinella Petrocchi, Alessandro Tommasi, Cesare Zavattari, Maurizio Tesconi: Semi-supervised Knowledge Extraction for Detection of Drugs and Their Effects. Social Informatics (1) 2016: 494-509
   - Documents which show my participation in Cassandra:
     * Fabio Del Vigna, Marinella Petrocchi, Maurizio Tesconi: Technical report on the methodology used for the analysis of websites (CASSANDRA project). TR-10-2016, Istituto di Informatica e Telematica, CNR, 2016. Available online: http://www.iit.cnr.it/node/40757
     * Fabio Del Vigna, Marinella Petrocchi, Paolo Deluca, Maurizio Tesconi: Main social media analysis outcome of the CASSANDRA project. TR-12-2016, Istituto di Informatica e Telematica, CNR, 2016. Available online: http://www.iit.cnr.it/node/41728

10. Start date Sept. 1, 2015. Duration 48 months: H2020-675320 NECS (*European Network for Cybersecurity*)
    - Topics: The NECS network of excellence trains PhD students on the themes of CyberSecurity, encouraging student exchanges among the partners of the consortium.
    - Website: http://www.necs-project.eu/
    - Partners: Consiglio Nazionale delle Ricerche (Coordinatore), Università del Kent, Università di Malaga, Università Tecnica Darmstadt, Università di Trento, British Telecom, Atos.

– My role: bf Co-tutor of doctoral students on network-specific topics such as: 1) Safe exchange and sharing of data online and 2) Studies on influence and trust on Social Media. In particular, I would like to point out the following work, in which I thank the NECS project, published in proceedings of the World Wide Web 2017 conference:
  ∗ Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Maurizio Tesconi: The paradigm-shift of social spambots: Evidence, theories, and tools for the arms race. Proceedings of WWW 2017, ACM, 2017.

11. October 1, 2016 - September 30, 2019: H2020-700294 C3ISP (*Collaborative and Confidential Information Sharing and Analysis for Cyber Protection*)
    – Topics: The project addresses IT information protection, with particular reference to the defense against cyberattacks.
    – Website: http://c3isp.eu/
    – Partners: Consiglio Nazionale delle Ricerche (Coordinatore), Iscom, Università del Kent, British Telecom, Digital Catapult, SAP, Chino, Grid Pocket, 3D Repo, Hewlett Packard Italiana
    – My role: **Co-investigator** (affiliated to the National Research Council) for the definition and analysis of data protection policies through the use of electronic contracts known as Data Sharing Agreements. In particular, I would like to point out the following recent work, in which I thank the C3ISP project, published in proceedings of ICISSP 2017, held in Porto from 19 to 21 February 2017:
      ∗ Gianpiero Costantino, Ilaria Matteucci, Fabio Martinelli, Marinella Petrocchi: Analysis of Data Sharing Agreements. ICISSP 2017, Scitepress, 2017.

- **National and regional projects**
  1. January 1, 2011 - December 31, 2013: MOBICARE, internal to IIT-CNR, funded by Registro.it.
     – Topics: The Mobicare project intends to create a data protection framework, for sensitive personal data belonging to the health sector, based on data sharing policies, in particular oriented to mobile devices.
     – Website: http://www.iit.cnr.it/node/30762
     – My role: **Co-investigator** in the area of definition and development of tools to edit security and privacy policies on mobile devices.
     – Team: Ilaria Matteucci , Paolo Mori, Marinella Petrocchi, Alessio Lunardelli, Riccardo Conti (IIT-CNR)
     – Scientific publications attesting my participation to MobiCare:
       ∗ Riccardo Conti, Alessio Lunardelli, Ilaria Matteucci, Paolo Mori, Marinella Petrocchi: Preserving Data Privacy in e-Health. In *Engineering Secure Future Internet Services and Systems* 2014: 366-392
       ∗ Riccardo Conti, Ilaria Matteucci, Paolo Mori, Marinella Petrocchi: An Expertise-Driven Authoring Tool for E-Health Data Policies. In *Computer-based Medical Systems* 2014: 82-87

  2. November 1, 2012 - October 31, 2014: regional project MYCHOICE (*Modelli e metodi per il filtraggio di recensioni online*), funded by Regione Toscana, Bay31, e IIT-CNR, within "Programma Operativo Regionale Competitività e Occupazione (Por Cro) del Fondo Sociale Europeo 2007-2013". Research grant Bando n. AR 20/2012, 20/08/2012, scientific coordinator: M. Petrocchi.
     – Topics: The purpose of MyChoice is to mitigate the presence of outliers in online recommendation systems and online social networks.
     – Website: http://mib.projects.iit.cnr.it/mychoice.html
     – My role: **Principal Investigator** of the project.
     – Team: In addition to myself, the research group is formed by Angelo Spognardi, the research fellow funded by the project (currently RTDb at University of Rome, La Sapienza), Roberto Di Pietro (Nokia Bell Labs, associate professor at the university of Padova, and associated IIT-CNR), Alessandro Colantonio (Bay31) and Maurizio Tesconi (IIT-CNR).

  3. December 28, 2012 - March 31, 2015: SECURE!, funded by Regione Toscana, "Programma Operativo Regionale POR-CREO 2007-2013, Fondo Europeo di Sviluppo Regionale".
     – Topics: Secure! defines and implements an ICT infrastructure for the prevention, anticipa-

tion and management of emergency situations, related to public safety and civil protection.
- Website: http://secure.eng.it/
- My role: **Representative** for Obiettivo Operativo 2: "study and development of tools for security, trust, privacy, and reliability, in the context of crowd-sourcing applications". In particular, I have taken care of the data privacy aspects, defining and creating an infrastructure that regulates the sharing of sensitive data exchanged in Secure!, based on privacy policies, and the aspects related to trust relationships between the Secure! users.
- Team: Engineering SpA, Consiglio Nazionale delle Ricerche, Iamboo, MICC, Università di Firenze, Resiltech.
- Documents that attest my participation to Secure! (they are documents restricted to the consortium and to the auditors):
  * Secure! Deliverable D2.4: Modelli e algoritmi per la privacy dei dati, sia in fase di acquisizione che di gestione e diffusione. Responsible partner: CNR (Gianpiero Costantino, Marinella Petrocchi, Fabio Martinelli), March 26, 2014;
  * Secure! Deliverable D2.5: Modelli e algoritmi per la gestione di reti sociali autonome e della credibilità dell'informazione raccolta e diffusa. Responsible partner: CNR (Gianpiero Costantino, Marinella Petrocchi, Fabio Martinelli), March 25, 2015.

4. June 1, 2014 - September 30, 2016: MIB (*My Information Bubble*), IIT-CNR internal project, funded by Registro.it (piano dei conti, modulo e GAE: 044.000.007 DIT.AD005.001 P0000125 MIB).
   - Topics: The MIB project studies the search results made by search engines, to quantify the degree of personalization of the results, in relation to the characteristics of the user who does the search.
   - Website: mib.projects.iit.cnr.it
   - My role: **Principal Investigator** of the project.
   - Team: In addition to myself, the research group is formed by Angelo Spognardi (Sapienza, Roma), Vittoria Cozza, funded by the project (currently researcher at the University of Padua), Roberto Di Pietro (Nokia Bell Labs, university of Padua, and associated IIT-CNR), Rocco De Nicola and Van Tien Hoang (IMT Lucca), Michela Fazzolari (funded by the project), Stefano Cresci and Maurizio Tesconi (IIT-CNR).

5. September 1, 2016 - August 31, 2018: regional project REVIEWLAND, funded by Fondazione Cassa di Risparmio di Lucca, "Bando Ricerca 2016-2017" (approved with "protocollo n. IIT-0007044 29/08/2016").
   - Topics: The aim of ReviewLand is to extract and analyze online reviews available on popular e-advice sites, with the aim of producing information on tourism and business services, with particular attention to the territory of Lucca and its province.
   - Website: reviewland.projects.iit.cnr.it
   - My role: **Principal Investigator** of the project.
   - Team: In addition to myself, the research group is formed by Michela Fazzolari and Massimiliano La Gala, IIT-CNR grant holders, funded by the project; Alessandro Tommasi and Cesare Zavattari, Lucense Scarl, Lucca; Angelo Spognardi, Sapienza University.

6. Feb 1, 2013 - March 31, 2016: SECURITY HORIZONS, "Progetto di ricerca di Rilevante Interesse Nazionale" (PRIN), funded by MIUR
   - Topics: The Security Horizons project intends to develop a rigorous methodology and a linguistic framework to provide formal methods to support the design, implementation and maintenance of secure software systems, in all the phases of software development: specification, implementation, validation, including verification and testing.
   - Website: http://www.iit.cnr.it/node/31739
   - My role: **Co-investigator** in the area of definition and development of formal methods for the analysis of safe software systems.
   - Team: Fabio Martinelli, Francesco Santini, Marinella Petrocchi
   - Scientific publications attesting my participation to Security Horizons
     * Marinella Petrocchi, Angelo Spognardi, Paolo Santi: Cryptofraglets Reloaded - Bioinspired Security Modeling of a RFID Protocol and Properties. BICT 2014

7. April 2019 - March 2022: TOFFEe: TOols for Fighting FakEs, "Progetto di Attività

Integrata" (PAI), funded by IMT Scuola Alti Studi Lucca
  – Topics: The TOFFEe project
  – Website: https://toffee.imtlucca.it/
  – My role: **Representative** for the area of defining and implementing automatic classifiers for fake news detection.
  – Team: Rocco De Nicola, Guido Caldarelli, Irene Crimaldi, Fabio Saracco, Marinella Petrocchi
  – Scientific publications attesting my participation to TOFFEe
    * Guido Caldarelli, Rocco De Nicola, Fabio Del Vigna, Marinella Petrocchi, Fabio Saracco
      The Role of Bot Squads in the Political Propaganda on Twitter. https://arxiv.org/abs/1905.12687

I also participated, in the early 2000s, to the following national projects:

- 2001 - 2002 Metodi formali e strumenti per l'analisi automatica di protocolli di sicurezza.
- 2001 - 2002 Strumenti, Ambienti e Applicazioni Innovative per la Società dell'Informazione.
- 2003 Metodi formali e strumenti per l'analisi e la verifica automatica di protocolli di sicurezza e di sistemi distribuiti.

Design and writing of project proposals (not funded). In addition to participating in the co-design and/or writing of the funded project proposals (detailed in the previous sections), over the years I have participated in the design and writing of other project proposals. I report below the most recent ones, under the H2020 financing program. Evaluation result: unfunded proposals.

1. SSh
   - Call: H2020-FETOPEN-1-2016-2017
   - Proposal number: 801329
   - Acronym and title: SSh - Security in the SHell
   - Topics: a highly interdisciplinary and ambitious research roadmap requiring expertise in materials science and computer science.
   - Rif. Gabriele Lenzini, University of Luxembourg (Coordinatore)
   - Evaluation "a very good" proposal (4.3/5)

2. SMARTNESS
   - Call: H2020-ICT-2015
   - Topic: ICT-10-2015 (CAPS - Collective Awareness Platforms for Sustainability and social innovation)
   - Proposal number: 687841
   - Acronym and title: SMARTNESS: SMART families with reliable collective awareNESS
   - Topics: Design and development of an ICT platform for the automatic classification of credibility and reliability of medical data, for sleeping disorders in newborns and children.
   - Ref. Rocco De Nicola, IMT Scuola Alti Studi Lucca (Coordinator)

3. SPRINT
   - Call: H2020-ICT-2016-2017
   - Topic: ICT-35-2016 (Enabling responsible ICT-related research and innovation)
   - Proposal number: 731549
   - Acronym and title: SPRINT - Socio-technical Platforms for Responsible INTeractions
   - Topics: Design and development of an ICT platform for the automatic classification of credibility and quality of mediacl data, with particular reference to the social dynamics and psychologic motivations that let people to communicate and discuss on the platform.
   - Ref. Rocco De Nicola, IMT Scuola Alti Studi Lucca (Coordinator)

4. INFLUX
   - Call: H2020-DS-2016-2017

- Topic: DS-01-2016 (Assurance and Certification for Trustworthy and Secure ICT systems, services and components)
- Proposal number: 732570
- Acronym and title: INFLUX - INnovative processes For introducing security in the Life cycle of Ubiquitous Cyber-physical Systems
- Topics: Definition and development of an ensemble of techniques for analyzing the security properties of important assets in the context of so-called cyber-physical systems.
- Ref. Stefania Gnesi, ISTI CNR, Pisa (Coordinator)

5. iFINder
   - Call: H2020-FETOPEN-RIA-2014-2015
   - Proposal number: 713358
   - Acronym and title: iFINder - an intelligent Forensics INvestigation platform
   - Topics: Definition and development of an ensemble of techniques to digitally support cyber-physical crimes investigation systems.
   - Ref. Josep Domingo-Ferrer, University of Tarragona (Coordinator) and Liliana Pasquale, University of Limerick

Detailed description of the research themes: The research themes that are listed below have been studied by the undersigned Marinella Petrocchi from the year 2000 up to the current day. The parentheses indicate the time period in which the research topic has been studied more accurately. The indicated period is linked to specific research projects on the subject and to the scientific publications obtained.

1. Social Media Intelligence (2016-2019)
2. Online behavioral modeling and analysis (2015-2019)
3. Online reviews analysis (2012-2019)
4. Analysis of the diffusion of novel drugs (2016-2017)
5. Fake accounts detection (2012-2019)
6. NLP and sentiment analysis to evaluate the information quality (2014-2017)
7. Online information filtering (2014-2016)
8. Study and development of architectural solutions for the definition and analysis of privacy and data access control policies (2013-2016)
9. Security mechanisms in emergency and prevention scenarios (2013-2015)
10. Decision making techniques (2011-2016)
11. Social networks of web services (2012-2015)
12. Reputation systems for online services (2011-2012)
13. Definition and formal analysis of data sharing agreements (2008-2016)
14. Innovative solutions for security in networks inspired by biological models (2006-2009)
15. Cooperation and trust management in mobile and distributed environments (2004-2006)
16. Formal analysis of secure multicast protocols (2002-2008)
17. Modeling techniques and formal analysis of security protocols and security technologies (2000-2008)

Below, I briefly describe the main activities that characterize the aforementioned research themes. The projects mentioned have been described in detail in the previous section of this CV.

1. *Social Media Intelligence*: my co-authors and me investigated the phenomenon of the spread of hate campaigns on social networks, against individuals or groups. We crawled and automatically classified (as belonging or not to the category "hate") a large number of comments to Facebook posts, obtaining promising accuracy results for the Italian language. The outcome of the work was presented at the first Italian Conference on Cybersecurity, in Venice, 18-21 January 2017. Furthermore, currently, together with my colleagues, I am studying the interaction relationships existing among Facebook users, to detect the dynamics for communities formation. Projects involved: TOFFEε,

Necs *Modeling and analysis of online user behavior*: I proposed, together with my co-authors, an innovative, simple, and efficient method to model the behavior of an online account. The method is based on the *sequentialization of the behavior of the account*, on a basis similar to those of genetic DNA. The analysis of the sequences allowed us to identify groups of new anomalous accounts (spambots), which are not identifiable by examining them one by one, and are not detectable by state-of-the-art detection tools. In a work accepted at the World Wide Web Conference in 2017, we have shown how neither Twitter, nor the state-of-the-art detection tools, nor the users of Twitter are able to recognize the new social spambots. In this regard, we have highlighted a new line of research, which also includes *our technique of digital DNA*, which tends to classify accounts based on the characteristics of the group, rather than the individual account. Projects involved: TOFFEe, MyChoice, ReviewLand, MIB, Necs

2. *Online reviews and associated metrics*: together with my co-authors, I developed components of a platform for *ranking the information available online*, in order to identify and discard information of little relevance to the user, prioritizing contents representative of the real value of information. Considering popular online review sites, we studied different metrics to aggregate the individual evaluations. In particular, we analyzed the robustness of the metrics, i.e., their ability to resist to artificial insertions of fake reviews, with values placed at the ends of the possible range of values. Different types of attack have been defined and implemented, with particular reference to their effectiveness (maximizing the effect, minimizing the number of reviews inserted). In order to carry out this study, it was necessary to create a crawler able to collect online reviews actually present on e-advice sites. We currently have a dataset containing about 500,000 reviews, from Amazon, Booking.com and Tripadvisor. With the collected data, we have built a database with reviews and we have carried out empirical studies on the robustness of various metrics. This analysis allowed the definition of a new metric that, for most of the attacks, proves to be more resistant than the current metrics used by real systems. Another analysis, in progress, aims to provide a refined information regarding the appreciation of tourists on services and products offered by a particular location, automatically highlighting patterns which are not appreciable with a manual analysis. One of the first results of the activity is the definition of the property of *adherence* of a review to the typical terminology of the reviews group to which this review belongs. We have shown that the metric of adherence is informative with respect to the score associated with the review. It has therefore been possible to use it as a tool for the detection of the polarity of the review, as an alternative to standard sentiment analysis techniques, which, contrary to our approach, usually require a training phase and are dependent on the domain of reviews. Projects involved: TOFFEe, MyChoice, ReviewLand, Necs

3. *Diffusion of novel psychoactive substances*: In the context of the European project Cassandra, we have studied the contents published on online drug forums, on Twitter, and obtained from online shopping sites, to trace the dynamics of diffusion of new psychoactive substances and quantify the success and popularity that they receive in terms of "online endorsement". We have studied how users are distributed, when a substance appears for the first time on the market, when it disappears. In addition, we have defined and developed a classifier to automatically recognize, given the posts in the online forums, the names of new substances and the effects connected to them, using a semi-supervised approach. The classifier performances are excellent, with an accuracy greater than 0.9. Projects involved: Cassandra

4. *Detection of anomalous accounts on social media*: The research activity was focused on the implementation of an efficient technique for the detection of so-called Twitter Fake Followers, those accounts specifically created to inflate the number of followers of a given account, in order to gain popularity. We have created a dataset of 5000 validated Twitter accounts, i.e., in this dataset human and fake accounts are known in advance. This dataset represents our gold standard for fake follower detection. For the realization of the gold standard we have created the advertising campaign The Fake Project, http://wafi.iit.cnr.it/TheFakeProject/, advertised by national online newspapers, with the aim of recruiting verified real accounts. See, for example, the article available on La Repubblica online at: https: //goo.gl/bMNOVF

   For the collection of fake accounts, instead, we turned to private companies able to provide followers on Twitter (at our expense). Working on the two sets of data, we defined an automatic classifier for the detection of fake followers, reaching a satisfactory trade off between complexity of the criteria to be applied and precision in discrimination. The results of the research were published in a journal of excellent international level (Elsevier Decision Support Systems). Projects involved: TOFFEe, MyChoice, Necs, MIB

Organization Committees and Technical Program Committees

In the lists that follow, I report the web page which shows my role as organizer of the event or participant in the program committee.

Chronological order:

- **Organization Committees** :

  1. Local organiser of *TSPUC 2005: First International Workshop on Trust, Security and Privacy for Ubiquitous Computing.* Taormina, Italy, June 13, 2005:
     http://ieeexplore.ieee.org/document/1443478/

  2. Local organiser of *ARTIST2: First International Workshop on Specification and Verification of Secure Embedded Systems.* Pisa, Italy, May 18, 2006. Website no more available at time of writing.

  3. Program Chair and General Chair of Special Session on "Trust in Pervasive Systems and Networks", affiliated to *SECRYPT 2008: International Conference on Security and Cryptography.* Porto, Portugal, July 2008. INSTICC Press. ISBN 978-989-8111-59-3. Website:
     http://secrypt.icete.org/SECRYPT2008/SpecialSessions.html

  4. Program Co-Chair and Local Organiser) of *EuroCAT 2009: 3rd European Workshop on Context Awareness and Trust.* Pisa, Italy, Sept. 9, 2009. CEUR Workshop Proceedings, Lenzini and Petrocchi Eds., vol. 504, 2009. (ISSN 1613-0073). Website:
     http://www.iit.cnr.it/eurocat2009/organization.html

  5. Session Co-Chair of Special Session on "Trust and Context in Ubiquitous Computing" affiliated to *IMIS 2010: 4th International Workshop on Intelligent, Mobile and Internet Services in Ubiquitous Computing.* Kracow, Poland, Feb. 17, 2010. Publisher: IEEE. Website:
     http://isyou.hosting.paran.com/imis10/?utm_source=researchbib#SpecialSessions

  6. Co-organiser of *POFI 2011, Workshop on Policies for the Future Internet*, Pisa, June 9, 2011. Website:
     http://www.iit.cnr.it/staff/marinella.petrocchi/pofi11/PoFI11.html

  7. Local organiser of *IEEE Policy 2011*, Pisa, June 6-8, 2011. Publisher IEEE. Website:
     http://www.policy-workshop.org/2011/committee.html;

  8. General Chair of *8th Workshop Security and Trust Management STM 2012*, colocated with ESORICS 2012, Pisa, Sept. 13-14 2012; Editor of volume LNCS 7783. Sito web:
     http://stm2012.di.unimi.it/committees.php

  9. Co-chair of *"Network and Communications Security" track, 6th International Symposium on Cyberspace Safety and Security CSS 2014*, Paris, August 20-22, 2014. Sito web::
     http://conference.css2014.studiocheik.fr/committees/css2014/front_page

  10. Publicity Chair of *14th IEEE International Conference on Computer and Information Technology CIT 2014*, Xian, September 11-13, 2014. Website
      http://meeting.xidian.edu.cn/conference/cit2014/org-committees.php

  11. Co-organizer of *1st Workshop on TEchnical and LEgal aspects of data pRIvacy and SEcurity TELERISE'15@ICSE*, Florence May 18, 2015. Website:
      http://www.iit.cnr.it/telerise2015/#organizers

  12. Privacy track chair of *14th IEEE International Conference on Trust, Security and Privacy in Computing and Communications IEEE TrustCom-15*, Helsinki, Finland, 20-22 August, 2015. Website:
      https://research.comnet.aalto.fi/Trustcom2015/organisation_committee.html

  13. Program Chair of *1st IEEE International Symposium on Recent Advances of Trust, Security and Privacy in Computing and Communications RATSP 2015*, Helsinki, Finland, 20-22 August, 2015. Website:
      https://research.comnet.aalto.fi/Trustcom2015/ratsp2015/

  14. Program Chair of the *Privacy Track @ SpaCCS 2017, 10th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage*, Guangzhou, China, December 12-15, 2017. Website:
      http://trust.gzhu.edu.cn/conference/SpaCCS2017/

  15. Co-director of *1st Ph.D. School on Security, Privacy, and Trust in Social Networks SNSPT16*

Padua, Italy, 4-9 Sept. 2016. The school has been funded by MIB (*My Information Bubble*), coordinated by myself, and the school topics have been chosen since inherent to the project topics. Website:
http://spritz.math.unipd.it/events/2016/SNSPT/Committees.html

16. General co-chair of *2nd Workshop on TEchnical and LEgal aspects of data pRIvacy and SEcurity TELERISE'16@ICWE*, Lugano June 9, 2016. Website:
http://www.iit.cnr.it/telerise2016/#organizers

17. Track chair of *9th IEEE EAI International Conference on Mobile Multimedia Communications Mobimedia*, Xian, China, June 18-20, 2016. Website:
http://www.mobimedia.org/2016/show/org-com

18. General co-chair of *3rd Workshop on TEchnical and LEgal aspects of data pRIvacy and SEcurity TELERISE'17@Safecomp*, co-located with Safecomp 2017, Trento, Sept 12-15, 2017.

19. General co-chair of *4th Workshop on TEchnical and LEgal aspects of data pRIvacy and SEcurity TELERISE'18@Adbis*, co-located with ADBIS 2018, Budapest, 2-5 Sept. 2018.

20. Chair of the Special Session on *Advanced and Trusted Models and Techniques for Fighting Fakes*, co-located with IEEE Advanced and Trusted Computing 2019, Leicester, UK, August 19-23, 2019. http://www.smart-world.org/2019/atc/

- **Technical Programme Committee member**:

  1. *TSPUC 2005: First International Workshop on Trust, Security and Privacy for Ubiquitous Computing*. Taormina, Italia, 16 Giugno, 2005. Atti pubblicati da IEEE press. Online document which shows my participation in the TPC:
  http://ieeexplore.ieee.org/document/1443478/

  2. *ICSNC 2006: International Conference on Systems and Networks Communications*. Tahiti, French Polynesia, 29 Ott. - 3 Nov. 2006. IEEE press. Website which shows my participation in the TPC: https://www.iaria.org/conferences2006/ComICSNC06.html

  3. *TSPUC 2006: Second International Workshop on Trust, Security and Privacy for Ubiquitous Computing*. Niagara Falls, USA, 26 Giugno, 2006. IEEE press. Website which shows my participation in the TPC: http://www.iit.cnr.it/en/node/538

  4. *TSPUC 2007: Third International Workshop on Trust, Security and Privacy for Ubiquitous Computing*. Helsinki, Finlandia, 18 Giugno, 2007. IEEE press. Online document which shows my participation in the TPC:
  http://www.computer.org/csdl/proceedings/wowmom/2007/0992/00/04351812.pdf

  5. *SECRYPT 2007: International Conference on Security and Cryptography*. Barcellona, Spagna, 28 - 31 Lug. 2007. INSTICC press. Website which shows my participation in the TPC:
  http://secrypt.icete.org/SECRYPT2007/ProgramCommittee.html

  6. *SAC-CLAT 2007: third forum of Computer-aided Law and Advanced Technologies*. Seul, Corea, 11 - 15 Marzo 2007. Website which shows my participation in the TPC:
  http://www.ieee-security.org/Calendar/cfps/cfp-CLAT2007.html

  7. *SECRYPT 2008: International Conference on Security and Cryptography*. Porto, Portogallo, 26 - 29 Lug. 2008. NSTICC press. Website which shows my participation in the TPC:
  http://secrypt.icete.org/SECRYPT2008/ProgramCommittee.html

  8. *ICSNC 2008: International Conference on Systems and Networks Communications*. Malta, 26 - 31 Ottobre, 2008. IEEE press. Website which shows my participation in the TPC:
  https://www.iaria.org/conferences2008/ComICSNC08.html

  9. *BIONETICS 2008: 3rd International ICST Conference on Bio-Inspired Models of Network, Information, and Computing Systems*. Osaka, Novembre 2008. ICST press. Proceedings, which shows my participation in the TPC:
  http://dl.acm.org/citation.cfm?id=1512504

  10. *BIONETICS 2009: 4th International ICST Conference on Bio-Inspired Models of Network, Information, and Computing Systems*. Avignon, December 2009. Springer. Frontmatter of proceedings, which shows my participation in the TPC:
  http://link.springer.com/content/pdf/bfm%3A978-3-642-12808-0%2F1.pdf

  11. *SECRYPT 2009: International Conference on Security and Cryptography*. Milan, Sept. 2010. INSTICC press. Website which shows my participation in the TPC:

http://www.secrypt.icete.org/SECRYPT2009/program_committee.asp

12. *ICSNC 2009: The Fourth International Conference on Systems and Networks Communications.* Porto, Sept. 2009. IEEE press. Website which shows my participation in the TPC: http://www.iaria.org/conferences2009/ComICSNC09.html

13. *UIC 2010: track on Pervasive Social Computing.* Xian, Oct. 2010. Springer LNCS. Website which shows my participation in the TPC: http://www.wikicfp.com/cfp/servlet/event.showcfp?eventid=7467&copyownerid=7892

14. *EuroCAT 2010: 4th European Workshop on Combining Context with Trust, Security, and Privacy.* Nice, August 2010. IEEE press. Website which shows my participation in the TPC: http://www.wikicfp.com/cfp/servlet/event.showcfp?eventid=7467&copyownerid=7892

15. *TrustID 2011: IEEE International Workshop on Trust and Identity in Mobile Internet, Computing and Communications.* Changsha, 16-18 November 2011. IEEE press. Website which shows my participation in the TPC: http://trust.csu.edu.cn/conference/TrustID2011/

16. *TrustID 2012: IEEE International Workshop on Trust and Identity in Mobile Internet, Computing and Communications.* Liverpool, 25-27 June 2012. IEEE press. Website which shows my participation in the TPC: http://www.trustid-ws.org/

17. *IThings 2012: IEEE International Conference on Internet of Things.* Besancon, 20-23 November, 2012. IEEE Digital Library. Website which shows my participation in the TPC: http://ithings.univ-fcomte.fr/committees.html

18. *IFIP Trust Management 2013: 7th International Conference on Trust Management.* Malaga, 3-7 July 2013. Springer. Website which shows my participation in the TPC: http://conf2013.ifiptm.org/organization

19. *TrustID 2013: IEEE International Workshop on Trust and Identity in Mobile Internet, Computing and Communications.* Melbourne, 16-18 July 2013. IEEE press. Website which shows my participation in the TPC: http://www.wikicfp.com/cfp/servlet/event.showcfp?eventid=28655&copyownerid=47177

20. *EUSPN 2013: 4th International Conference on Emerging Ubiquitous Systems and Pervasive Networks.* Elsevier. Website which shows my participation in the TPC: http://cs-conferences.acadiau.ca/euspn-13/#programCommittees

21. *ReSA4CI 2014: 1st International Workshop on Reliability and Security Aspects for Critical Infrastructure Protection.* Florence, September 9, 2014. Springer. Website which shows my participation in the TPC: http://www.safecomp2014.unifi.it/resa4ci/

22. *SECOTS 2014: Fourth International Symposium on Security in Collaboration Technologies and Systems.* Minneapolis, May 19-23, 2014. IEEE Digital Library. Website which shows my participation in the TPC: http://cts2014.cisedu.info/2-conference/symposia/symp-03-secots-2014

23. *CIT 2015: 25th International Conference on Computer and Information Technology.* Liverpool, 26-28 Oct. 2015. IEEE. Website which shows my participation in the TPC: http://cse.stfx.ca/ cit2015/techcommittee.html

24. *STM 2015: Security and Trust Management.* Vienna, 21 Sept. 2015. Springer. Website which shows my participation in the TPC: http://stm2015.di.unimi.it/index.php?pageid=committees

25. *13th Annual IEEE Consumer Communications and Networking Conference CCNC 2016 (track on Security, Privacy, and Content Protection).* Las Vegas, January 8-11, 2016. Atti formali pubblicati da IEEE. Website which shows my participation in the TPC: http://ccnc2016.ieee-ccnc.org/committee

26. *ReSA4CI15: 2nd International Workshop on Reliability and Security Aspects for Critical Infrastructure Protection.* Delft, Sept. 22, 2015. Springer. Website which shows my participation in the TPC: http://safecomp2015.tudelft.nl/resa4ci-2015

27. *BCSN 2015: Workshop on Bio-inspired Cyber Security & Networking.* Ghent, Sept. 11, 2015.

IEEE press. Website which shows my participation in the TPC:
http://stegano.net/BCSN2015/

28. *STAST 2016: 6th International Workshop on Socio-Technical Aspects in Security and Trust.* Los Angeles, December 5, 2016. IEEE. Website which shows my participation in the TPC: http://stast.uni.lu/organization.html

29. *SEFM16: 14th International Conference on Software Engineering and Formal Methods.* Wien, July 4-8 2016. Springer. Website which shows my participation in the TPC: http://staf2016.conf.tuwien.ac.at/sefm/committees/

30. *IEEE TrustCom-16: 15th IEEE International Conference on Trust, Security and Privacy in Computing and Communications.* Tianjin, 23-26 August 2016. IEEE. Website which shows my participation in the TPC: http://adnet.tju.edu.cn/TrustCom2016/

31. *BIOSTAR 2016: Intl. Workshop on Bio-Inspired Security, Trust, Assurance and Resilience.* San Jose, May 26, 2016. IEEE. Website which shows my participation in the TPC: http://cygnus.tele.pw.edu.pl/~wmazurczyk/biostar/2016/index.html

32. *ATC 2016: 13th IEEE International Conference on Advanced and Trusted Computing.* Tolosa, July 18-21, 2016. IEEE. Website which shows my participation in the TPC: https://atc2016.sciencesconf.org/resource/page/id/3

33. *ATC 2017: 14th IEEE Conference on Advanced and Trusted Computing.* San Francisco, Aug. 4-8 2017. IEEE. Website which shows my participation in the TPC: http://ieee-smartworld.org/2017/atc/

34. *SEFM 2017: 15th International Conference on Software Engineering and Formal Methods .* Trento, Sept. 6-10, 2017. Springer. Sito Website which shows my participation in the TPC: http://sefm17.fbk.eu/committees

35. *IEEE-CIT 2017: 17th IEEE International Conference on Computer and Information Technology.* Helsinki, August 21-23 2017. IEEE. Website which shows my participation in the TPC: https://research.comnet.aalto.fi/CIT2017/tpcommittee.html

36. *CLAW 2017: 3rd International IEEE Workshop on Legal and Technical Issues in Cloud Computing and the Internet of Things .* Vancouver, April 7 2017. IEEE. Website which shows my participation in the TPC: http://www.claw-workshop.org/

37. *BIOSTAR 2017: Intl. on Bio-inspired Security, Trust, Assurance and Resilience .* San Jose, May 25 2017. IEEE. Website which shows my participation in the TPC: http://biostar.cybersecurity.bio/

38. *BIOSTAR 2018: Intl. on Bio-inspired Security, Trust, Assurance and Resilience .* San Francisco, May 24, 2018. IEEE. Website which shows my participation in the TPC: http://biostar.cybersecurity.bio/

39. *ATC 2018: 15th IEEE Conference on Advanced and Trusted Computing.* Guangzhou, China, October 8, 2018. IEEE. Website which shows my participation in the TPC: http://ieee-smartworld.org/2018/atc/

40. *HUSO 2018: 4th International Conference on Human and Social Analytics.* Venezia, June 24-28 2018. Website which shows my participation in the TPC: https://www.iaria.org/conferences2018/ComHUSO18.html

41. *STM 2018:14th International Workshop on Security and Trust Management.* Barcelona, Spain, September 6-7, 2018. Website which shows my participation in the TPC: https://www.nics.uma.es/pub/stm18/comitee.html

42. *CLAW 2018: 4th International Workshop on Legal and Technical Issues in Cloud and Pervasive Computing .* Singapore, October 8, 2018. Website which shows my participation in the TPC: http://www.claw-workshop.org/

43. *IEEE Euro S&P 2019: 4th IEEE European Symposium on Security and Privacy.* Stockholm, June 17-19, 2019. Website which shows my participation in the TPC: https://www.ieee-security.org/TC/EuroSP2019/

Reviewer for the following journals

Over the years, I use to review articles submitted for journal publication. Usually. I receive requests via e-mails from the journal publishers.

1. Online Social Networks and Media, Elsevier Science Publishers, Amsterdam, The Netherlands.
2. Multimedia Tools and Applications, Springer International Publishing.
3. Decision Support Systems, Elsevier Science Publishers, Amsterdam, The Netherlands.
4. BMC Medical Informatics and Decision Making, BioMed Central.
5. Security and Communication Networks, Hindawi, Wiley and sons Inc.
6. Theoretical Computer Science, Elsevier Science Publishers, Amsterdam, The Netherlands.
7. Journal of Systems and Software, Elsevier Science Publishers, Amsterdam, The Netherlands.
8. WiNet - Wireless Networks, Springer, The Netherlands.
9. Ad Hoc Networks, Elsevier Science Publishers, Amsterdam, The Netherlands.
10. Pervasive and Mobile Computing, Elsevier Science Publishers, Amsterdam, The Netherlands.
11. IEEE Transactions on Industrial Informatics, IEEE press.
12. Computer Networks: The International Journal of Computer and Telecommunications Networking, Elsevier Science Publishers, Amsterdam, The Netherlands.
13. Computer Standards & Interfaces, Elsevier Science Publishers, Amsterdam, The Netherlands.
14. International Journal of Computers and Their Applications, ISCA Press.
15. Computers Communications, Elsevier Science Publishers, Amsterdam, The Netherlands.
16. International Journal of Computers and Applications, ACTA Press.
17. Trust Modeling and Management in Digital Environments, IGI Global, 2010 (book).
18. Architecting Dependable Systems 6, Springer, 2010 (book).

Reviewer for the following projects

1. I am currently an evaluator for the Ministry of Economic Development for the project proposals submitted to the MiSE calls - "Fondo per la crescita sostenibile - Programma Operativo Nazionale Imprese e competitività 2014 - 2020 FESR". Letter of appointment signed by the CNR General Director, Massimiliano Di Bitetto, dated 27/12/2016.

2. I was evaluator of the European project FP7-JTI-269317: nShield (*New embedded Systems arcHItecturE for multi-Layer Dependable solutions*), on behalf of the European Community (ARTEMIS JU). I reviewed all the deliverables of the second and third (and last) year of the project and I participated to the second review, in Campi Bisenzio (Florence) on November 15, 2014 and to the final review, in Milan on January 21, 2015. Letter of appointment D 2013/100364 of 25/10/2013 and letter of assignment D/2014/100312 dated 21/10/2014, issued respectively by ARTEMIS Joint Undertaking, Brussels, and by ECSEL Joint Undertaking, Brussels.

3. I was a project evaluator for the Luxembourg National Research Fund (FNR), for the call INTER Mobility grant scheme (ID 10652493) launched in January 2015. Letter of appointment of 21/07/2015, issued by email from grants.fnr.lu, by Andreea Monnat.

4. Project evaluator for the STW Dutch foundation (http://www.stw.nl), which funds technology research in universities and research institutes. The project proposal I reviewed concerned the security of networks and information systems. References: I have no more references for this assignment, but I declare that I fulfilled the committment.

Tutoring

- I have been (or I am) the scientific responsible for the following research fellows:
  1. Angelo Spognardi. Project MyChoice, Call IIT 20/2012 (Protocol n. IIT 0005164, 20/08/2012) and Call IIT 18/2014 (Protocol n. IIT 0006712, 22/09/2014). Angelo Spognardi was a research fellow at IIT-CNR from November 1, 2012 to August 23, 2015;
  2. Vittoria Cozza. Project MIB, Call IIT 1/2015 (Protocol n. IIT 0000873, 04/02/2015). Vittoria Cozza was a research fellow at IIT-CNR from March 2015 to February 29, 2016;

3. Michela Fazzolari, project MIB, Call IIT 3/2106 (Protocol n. IIT 0001022, 15/02/2016). Michela Fazzolari is a research fellow at IIT from March 15, 2016;

4. Massimiliano La Gala, project REVIEWLAND, Call IIT 17/2016 (Protocol n. IIT 0007957, 30/09/2016). Massimiliano La Gala was a reserach fellow at IIT-CNR from November 2, 2016, to October 31, 2017.

- I was the supervisor of the following Ph.D. students:

1. Van Tien Hoang, IMT Scuola Alti Studi Lucca. XXIX cycle. Thesis title: it Measuring Web Search Personalization. Tutors: Rocco De Nicola, Marinella Petrocchi, Vittoria Cozza. The thesis reports the studies and experiments performed by the PhD student on the personalization of the search results operated by Google, Google Shopping, and Google News. The thesis has been successfully judged by the external reviewers. The defence was on March 12, 2018.

2. Irfan Khan Tanoli, Gran Sasso Science Institute. XXX cycle. Tutors: Rocco De Nicola, Marinella Petrocchi. The subject of the PhD student's study focuses on the transformation of sentences in natural language, which describe the conditions that govern the data published on social networks, in privacy policies written in semi-controlled natural language. The thesis has been successfully judged by the external reviewers. The defence was on January, 23, 2019.

- I was the tutor of the following high school students:

1. "Alternanza scuola lavoro": IIT-CNR tutor for the internships of the students Quilici Filippo, Sensi Tommaso, Petrocchi Stefano and Simi Riccardo, high school Enrico Fermi, Lucca. Duration of the internship: 7-19 September 2015. Letter of appointment prot. IIT 0004855, 09/07/2015.

2. "Alternanza scuola lavoro": IIT-CNR tutor for the internships of the students Pizzo Francesco, Seregni Luca, Misso Timothy, e Bandoni Jacopo, high school Enrico Fermi, Lucca. Duration of the internship: 5-17 September 2016. Letter of appointment prot. IIT 0006847, 10/08/2016.

Editorial activity

- Proceedings:

1. Ilaria Matteucci, Paolo Mori, Marinella Petrocchi (editors): Proceedings of 1st IEEE/ACM International Workshop on TEchnical and LEgal aspects of data pRIvacy and SEcurity, TELERISE 2015, Florence, Italy, May 18, 2015. IEEE Computer Society 2015, ISBN 978-1-4673-7097-4

2. Audun Josang, Pierangela Samarati, Marinella Petrocchi (editors): Security and Trust Management - 8th International Workshop, STM 2012, Pisa, Italy, September 13-14, 2012, Revised Selected Papers. Lecture Notes in Computer Science 7783, Springer 2013, ISBN 978-3-642-38003-7 (2012)

3. Gabriele Lenzini and Marinella Petrocchi (editors): Proceedings of the European Context Awareness and Trust 2009 (EuroCAT09), 3rd Workshop on Combining Context with Trust, Security, and Privacy, CEUR Workshop Proceedings, vol. 504, 2009. (ISSN 1613-0073).

- Journal special issues:

1. Maleh Yassine, Ghita Mezzour, Marinella Petrocchi, Abdelkrim Haqiq (editors):- International Journal of Digital Crime and Forensics (IJDCF), Volume 11, Issue 3 (2019): Special issue on Recent Advances on Cyber Security and Privacy for Cloud-of-Things. In progress.

2. Zheng Yan, Peter Mueller, Xinyi Huang, Xiangjian Sean He, Marinella Petrocchi (editors): International Journal of Information Security and Privacy (IJISP) - Special Issue on Trust, Security, and Privacy in Computing and Communications (Part 1), IGI-Global, volume 9, number 2, April-June 2015 (2015) Documento di riferimento disponibile online: https://goo.gl/4fFIKG

3. Zheng Yan, Peter Mueller, Xinyi Huang, Xiangjian Sean He, Marinella Petrocchi (editors): International Journal of Information Security and Privacy (IJISP) - Special Issue on Trust, Security, and Privacy in Computing and Communications (Part 2), IGI-Global, volume 9, number 3, July-September 2015 (2015). Documento di riferimento disponibile online: https://goo.gl/AWV73o

Seminars

1. M. Petrocchi. *Better Safe than Sorry: an Adversarial Approach to improve Social Bot Detection*, at TOFFEe Kick-off Meeting, IMT Scuola Alti Studi Lucca, Lucca, Italy, April 17, 2019. (Ref. Rocco De Nicola, IMT Lucca)

2. M. Petrocchi. *Detection of Hate Speech*, at CyberSecurity Day 2018, Officine Garibaldi, Pisa, Italy, October 12, 2018. (Ref. Fabio Martinelli, IIT-CNR)

3. M. Petrocchi. *Social Spambots: What they are and how to find them*, at Consiglio Nazionale delle Ricerche, Pisa, Italy, October 24, 2017. (Ref. Adriana Lazzaroni, IIT-CNR)

4. M. Petrocchi. *Downsides of Big Data - Uncertainty in Social Media Sensing & Bots*, at SoBig-Data@European University Institute, Fiesole, Italy. October 11, 2017. (Ref. Fosca Giannotti, ISTI-CNR)

5. M. Petrocchi. *Protection of (personal) data: Technical and legal perspectives*, at DTU Compute, Copenhagen. October 12, 2016. (Ref. Angelo Spognardi, DTU Compute)

6. M. Petrocchi. *Protection of (personal) data: Technical and legal perspectives*, at Gran Sasso Science Institute, L'Aquila. May 13, 2015. (Ref. Rocco De Nicola, IMT, SYSMA Research Unit)

7. M. Petrocchi. *The Wheat and the Chaff in the Universe of Twitter accounts*, at IMT Scuola Alti Studi Lucca, February 26 2014. (Ref. Rocco De Nicola, IMT, SYSMA Research Unit)

8. M. Petrocchi. *A framework for security analysis with team automata* at DIMACS Center, Rutgers University, Piscataway, NJ, USA, colocated with *DIMACS Workshop on Security Analysis of Protocols*, June 8, 2004.

9. M. Petrocchi. *Security Issues in Multicast Protocols: an Introduction* at IIT-CNR, Pisa, March 28, 2002.

10. M. Petrocchi. *Formal Validation* presso:
    - DIES, University of Twente, The Netherlands, March 21, 2002;
    - Information Engineering Dept., Pisa, February 5, 2002;
    - Retis Lab, Scuola Superiore Sant'Anna, Pisa, February 15, 2002;
    - IIT-CNR, Pisa, July 10 2002.

11. M. Petrocchi. *I protocolli di sicurezza ed uno strumento per la loro analisi*, at IIT-CNR, Pisa, June 19, 2001.

Awards

- *Honorable mention*: Alessandro Colantonio, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Visual detection of singularities in review platforms. Symposium of Applied Computing, 2015: 1294-1295, ACM.

- By invitation: participation at *1st TelCo 2.0 + Web 3.0 Workshop*. Turin, 21-22 November 2007.

- Participation, as a speaker, at *DIMACS Workshop on Security Protocols*, Rutgers University, NJ, USA, 7-9 June 2004, thanks to a grant of 1500 US dollars, to cover travel expenses and accommodation.

- Participation, as a speaker, at *First Workshop on Views On Designing Complex Architectures (VODCA 2004)*, Bertinoro, 11-12 September 2004, thanks to a grant from the organization that entirely covered the costs of registration, board and lodging.

- By invitation: partecipation at *3rd International Workshop on Verification, Model Checking and Abstract Interpretation (VMCAI 2002)*. Venice, January 21-22, 2002.

- Winner of an IBM Student Award to participate at the *7th Symposium on Research in Computer Security (ESORICS 2002)*. Zurich, October 2002.

List of publications

- For ISI journals, I report the Impact Factor of the year of publication, the latest available Impact Factor (as from the journal's website), the Impact Factor of the last 5 years (from the journal's website), the Scimago quartile, according to scimagojr.com, the number of quotes, from Scopus and Google Scholar, and the number of authors. The values of the IFs and the quartiles are updated as of December 14th, 2017.

- For non-ISI journals, I report the latest SNIP and SJR, if available.

- For conferences, I report the conference rating - available from the GII-GRIN and CORE2014 rankings - and the number of citations, according to Scopus and according to Google Scholar (updated as of February 26, 2017).

- Finally, the Scopus metrics are updated as of February 26, 2017 and the Scholar metrics as of December 14, 2017.

Journals:

1. Stefano Cresci, Marinella Petrocchi, Angelo Spognardi, Stefano Tognazzi: On the capability of evolved spambots to evade detection via genetic engineering, in Online Social Networks and Media, 9: 1-16 (2019), Elsevier

2. Pietro Ducange, Michela Fazzolari, Marinella Petrocchi, Massimo Vecchio: An Effective Decision Support System for Social Media Listening Based on Cross-source Sentiment Analysis Models, in Engineering Applications of Artificial Intelligence, 78: 71-85 (2019) Elsevier

3. Michela Fazzolari, Marinella Petrocchi: Enriching Travelling Information Through Online Reviews Analysis, in press Information Technology and Tourism, 20(1-4): 37-58 (2018)
   Impact Factor 2016: ; 5-year Impact Factor: ; quartile 2016 ; #citations: (Scopus) (Google Scholar); n.autori 2

4. Fabio Del Vigna, Marinella Petrocchi, Alessandro Tommasi, Cesare Zavattari, Maurizio Tesconi: Who framed Roger Reindeer? De-censorship of Facebook posts by snippet classification. *Online Social Networks and Media*, Elsevier, Volume 6, June 2018, Pages 41-57, 2018.
   Impact Factor 2016: ; 5-year Impact Factor: ; quartile 2016 ; #citations: (Scopus) (Google Scholar); n.autori 5

5. Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Maurizio Tesconi: Social fingerprinting: detection of spambot groups through DNA-inspired behavioral modeling. IEEE Transactions on Dependable and Secure Computing, 15(4): 561-576 (2018)
   Impact Factor 2016: 2.926; 5-year Impact Factor: —; quartile 2016 Q2; #citations: 0 (Scopus) 4 (Google Scholar); n.autori 5

6. Gianluca Dini, Fabio Martinelli, Ilaria Matteucci, Marinella Petrocchi, Andrea Saracino, Daniele Sgandurra: Risk Analysis of Android Applications: A User-Centric Solution. In Elsevier *Future Generation Computer Systems* Volume 80: 505-518 (2018).
   Impact Factor 2016: 3.997; 5-year Impact Factor: 4.787; quartile 2016 Q1; #citations: 0 (Scopus) 3 (Google Scholar); n.autori 6

7. Michela Fazzolari, Vittoria Cozza, Marinella Petrocchi, Angelo Spognardi: A Study on Text-Score Disagreement in Online Reviews. Springer Cognitive Computation 9(5): 689-701 (2017)
   Impact Factor 2016: 3.441; 5-year Impact Factor: 2.531; quartile 2016 Q2; #citations: 0 (Scopus) 0 (Google Scholar); n.autori 4

8. Alessandro Maggi, Marinella Petrocchi, Angelo Spognardi, Francesco Tiezzi: A language-based approach to modelling and analysis of Twitter interactions. In Elsevier *JLAMP: Journal of Logic and Algebraic Programming*(2017). Volume 87, February 2017, Pages 67-91.
   Impact Factor 2016: 0.692; 5-year Impact Factor: 0.692; quartile 2016 Q2; #citations: 0 (Scopus) 0 (Google Scholar); n.autori 4

9. Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Maurizio Tesconi: DNA-Inspired Online Behavioral Modeling and Its Application to Spambot Detection. In IEEE *Intelligent Systems* 31(5): 58-64 (2016).
   Impact Factor 2016: 3.70; 5-year Impact Factor: 3.70; quartile 2015 Q1; #citations: 0 (Scopus) 10 (Google Scholar); n.autori 5

10. Marinella Petrocchi, Angelo Spognardi, Paolo Santi: Bioinspired Security Analysis of Wireless Protocols. In Springer *Mobile Networks and Applications - MONET* 21(1): 139-148 (2016).
    Impact Factor 2016: 3.259; 5-year Impact Factor: 2.788; quartile 2016 Q1; #citations: 0 (Scopus) 1 (Google Scholar); n.autori 3

11. Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Maurizio Tesconi: Fame for sale: Efficient detection of fake Twitter followers. In Elsevier *Decision Support Systems* 80: 56-71 (2015).
    Impact Factor 2016: 3.222; Impact Factor 2015: 2.604; 5-year Impact Factor: 4.290; quartile 2016 Q1; #citations: 8 (Scopus) 29 (Google Scholar); n.autori 5

12. Marco Casassa Mont, Ilaria Matteucci, Marinella Petrocchi, Marco Luca Sbodio: Towards safer information sharing in the cloud. In Springer *Int. Journal of Information Security* 14(4): 319-334 (2015).
    Impact Factor 2016: 1.915; Impact Factor 2015: 1.279; 5-year Impact Factor: 1.946; quartile 2016 sia Q1 che Q2; #citations: 1 (Scopus) 6 (Google Scholar); n.autori 4

13. Noura Faci, Marinella Petrocchi, Gianpiero Costantino, Fabio Martinelli, Zakaria Maamar: A quality model for social networks populated with web services. In Springer *Service Oriented Computing and Applications* 9(2): 139-155 (2015).
    Rivista non ISI; SNIP 2015: 1.355; SJR 2015: 0.618; SNIP 2016: 1.691; SJR 2016: 0.661; quartile 2016 sia Q1 che Q2; #citations: 0 (Scopus) 2

(Google Scholar); n.autori 5

14. Levente Buttyan, Laszlo Dora, Fabio Martinelli, Marinella Petrocchi: Fast certificate-based authentication scheme in multi-operator maintained wireless mesh networks. In Elsevier *Computer Communications* 33(8): 907-922 (2010)

    Impact Factor 2010: 0.816; Impact Factor 2016: 3.338; 5-year Impact Factor: 2.898; quartile 2010 Q2; #citations: 3 (Scopus) 11 (Google Scholar); n.autori 4

15. Roberto Gorrieri, Fabio Martinelli, Marinella Petrocchi: Formal Models and Analysis of Secure Multicast in Wired and Wireless Networks. Springer J. Automated Reasoning 41(3-4): 325-364 (2008). IF 2.113.

    Impact Factor 2008: 1.691; Impact Factor 2016: 1.636; 5-year Impact Factor: 1.344; quartile 2008 sia Q1 che Q2; #citations: 6 (Scopus) 9 (Google Scholar); n.autori 3

16. Fabrizio Baiardi, Alessandro Falleni, Riccardo Granchi, Fabio Martinelli, Marinella Petrocchi, Anna Vaccarelli. SEAS: a Secure E-voting Applet System. In *Computers and Security*. 24(8): 642-652. Elsevier, 2005.

    Impact Factor 2005: 0.743; Impact Factor 2016: 2.849; 5-year Impact Factor: 2.943; quartile 2005 sia Q1 che Q2; #citations: 23 (Scopus) 75 (Google Scholar); n.autori 6

17. Vincenzo Ciancia, Jose Antonio Martin, Fabio Martinelli, Ilaria Matteucci, Marinella Petrocchi, Ernesto Pimentel: Automated Synthesis and Ranking of Secure BPMN Orchestrators. *International Journal of Secure Software Engineering* IJSSE 5(2): 44-64 (2014), IGI Global.

    Impact Factor: non ISI; #citations: 0 (Scopus) 0 (Google Scholar)

18. Maurice ter Beek, Gabriele Lenzini, Marinella Petrocchi. A Team Automaton Scenario for the Analysis of Security Properties in Communication Protocols. *Journal of Automata, Languages and Combinatorics* JALC 11(4): 345374 (2006), 345374, Institut fur Informatik, Justus-Liebig-Universitat Giessen.

    Impact Factor: non ISI; #citations: 0 (Scopus) 3 (Google Scholar)

19. F. Martinelli, M. Petrocchi, A. Vaccarelli. Formal analysis of some secure procedures for certificate delivery. *Software, Testing, Verification and Reliability (STVR)*. 16(1):33-59. Wiley and Co., 2006.

    Impact Factor 2006: 1.1; Impact Factor 2016: 1.588; quartile 2006 Q1; #citations: 3 (Scopus) 6 (Google Scholar)

Conferences and Workshops:

1. Stefano Cresci, Marinella Petrocchi, Angelo Spognardi, Stefano Tognazzi: Better Safe than Sorry: an adversarial approach to improve social bot detection, In Web Science 2019, ACM

2. Tiziano Fagni, Leonardo Nizzoli, Marinella Petrocchi, Maurizio Tesconi: Six Things I Hate About You (in Italian) and Six Classification Strategies to More and More Effectively Find Them. ITASEC 2019

3. Vittoria Cozza, Van Tien Hoang, Marinella Petrocchi, Rocco De Nicola: Transparency in Keyword Faceted Search: An Investigation on Google Shopping. IRCDL 2019: 29-43

4. Michela Fazzolari, Marinella Petrocchi, Angelo Spognardi: Predicting online review scores across reviewer categories. 19th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL) LNCS 11314, Springer, 2018.

5. Francesco Buccafurri, Michela Fazzolari, Gianluca Lax, Marinella Petrocchi: Contrasting Fake Reviews in TripAdvisor. SEBD 2018, June 24-27, 2018, Castellaneta Marina, Italy. CEUR Workshop Proceedings.

6. Irfan Khan Tanoli, Marinella Petrocchi, Rocco De Nicola: Towards Automatic Translation of Social Network Policies into Controlled Natural Language. IEEE 12th International Conference on Research Challenges in Information Science (RCIS), Nantes, 2018, pp. 1-12.

7. Gianpiero Costantino, Fabio Martinelli, Ilaria Matteucci, Marinella Petrocchi: Efficient Detection of Conflicts in Data Sharing Agreements. ICISSP (Revised Selected Papers): Communications in Computer and Information Science book series (CCIS, volume 867148-172, Springer, 2018).

8. Stefano Cresci, Marinella Petrocchi, Angelo Spognardi, Stefano Tognazzi: From Reaction to Proaction, unexplored ways to the detection of evolving spammers. *OSNED 2018*, a workshop@The Web Conference, ACM, (WWW Companion Volume) 2018: 1469-1470.

9. Vittoria Cozza, Marinella Petrocchi, Angelo Spognardi: Mining implicit data association from Tripadvisor hotel reviews. DARLI-AP 2018, 2nd International Workshop on Data Analytics Solutions for Real-LIfe APplications, Wien, March 26, 2018.

10. S. Cresci, R. Di Pietro, M. Petrocchi, A. Spognardi, and M. Tesconi: DNA Fingerprinting: a nature-inspired technique for spambot detection. In *2nd Italian Conference on Cybersecurity* ITASEC 2018

11. S. Cresci, R. Di Pietro, M. Petrocchi, A. Spognardi, and M. Tesconi: Exploiting digital DNA for the analysis of similarities in Twitter behaviours. In *4th IEEE International Conference on Data Science and Advanced Analytics* DSAA 2017

12. Michela Fazzolari, Marinella Petrocchi, Alessandro Tommasi, Cesare Zavattari. Mining Worse and Better Opinions: Unsupervised and Agnostic Aggregation of Online Reviews. In *17th International Conference on Web Engineering*, Rome, June 2017.
    GII-GRIN rating: N.A.; CORE ranking: C

13. Stefano Cresci, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi, Maurizio Tesconi: The paradigm-shift of social spambots: Evidences, theories and tools for the arms race. In *World Wide Web* WWW 2017, ACM, Aprile 3-7, 2017, Perth, Australia.
    GII-GRIN rating: A++; CORE ranking: A*; #citations: 0 (Scopus) 9 (Google Scholar)

14. Fabio Del Vigna, Andrea Cimino, Felice Dell'Orletta, Marinella Petrocchi, Maurizio Tesconi. Hate me, hate me not: Hate speech detection on Facebook. In *Italian Conference on Cybersecurity* ITASEC 2017, Venezia, 18-21 Gennaio 2017. CEUR Workshops Proceedings.
    GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 2 (Google Scholar)

15. Gianpiero Costantino, Fabio Martinelli, Ilaria Matteucci, Marinella Petrocchi: Analysis of Data Sharing Agreements. In *Information Systems Security and Privacy* ICISSP 2017, Porto, 19-21 Febbraio 2017, Scitepress.
    GII-GRIN rating: N.A.; CORE N.A.; #citations: 0 (Scopus) 0 (Google Scholar)

16. Jose Fran. Ruiz, Marinella Petrocchi, Ilaria Matteucci, Gianpiero Costantino, Carmela Gambardella, Mirko Manea, Anil Ozdeniz: A Lifecycle for Data Sharing Agreements: How it Works Out. In: Schiffner S., Serna J., Ikonomou D., Rannenberg K. (eds) *Privacy Technologies and Policy*. APF 2016: 3-20. Lecture Notes in Computer Science, vol. 9857. Springer, Cham
    GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 2 (Google Scholar)

17. Van Tien Hoang, Vittoria Cozza, Marinella Petrocchi, Rocco De Nicola: Online User Behavioural Modeling with Applications to Price Steering. In *Personalization & Recommender Systems in Financial Services* FINREC 2016: 16-21, Bari, Italy, June 16, 2016, CEUR Workshop Proceedings
    GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 0 (Google Scholar)

18. Vittoria Cozza, Van Tien Hoang, Marinella Petrocchi, Angelo Spognardi: Experimental Measures of News Personalization in Google News. In: Casteleyn S., Dolog P., Pautasso C. (eds) *Current Trends in Web Engineering* ICWE Workshops 2016: 93-104. Lecture Notes in Computer Science, vol. 9881. Springer, Cham.
    GII-GRIN rating: N.A.; CORE ranking: B; #citations: 0 (Scopus) 1 (Google Scholar)

19. Vittoria Cozza, Marinella Petrocchi, Angelo Spognardi: A Matter of Words: NLP for Quality Evaluation of Wikipedia Medical Articles. In: Bozzon A., Cudre-Maroux P., Pautasso C. (eds) *Web Engineering* ICWE 2016:448-456. Lecture Notes in Computer Science, vol 9671. Springer, Cham.
    GII-GRIN rating: N.A.; CORE ranking: B; #citations: 0 (Scopus) 3 (Google Scholar)

20. Fabio Del Vigna, Marco Avvenuti, Clara Bacciu, Paolo Deluca, Marinella Petrocchi, Andrea Marchetti, Maurizio Tesconi: Spotting the Diffusion of New Psychoactive Substances over the Internet. In: Bostrom H., Knobbe A., Soares C., Papapetrou P. (eds) *Advances in Intelligent Data Analysis XV*. IDA 2016: 86-97. Lecture Notes in Computer Science, vol. 9897. Springer, Cham.
    GII-GRIN rating: B; CORE ranking: A; #citations: 1 (Scopus) 3 (Google Scholar)

21. Vittoria Cozza, Van Tien Hoang, Marinella Petrocchi: Google Web Searches and Wikipedia Results: A Measurement Study. In *Italian Information Retrieval* IIR 2016, Venezia, Italy, May 30-31, 2016. CEUR Workshop Proceedings
    GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 0 (Google Scholar)

22. Vittoria Cozza, Marinella Petrocchi: mib at SemEval-2016 Task 4a: Exploiting lexicon based features for Sentiment Analysis in Twitter. In *Semantic Evaluation* SemEval@NAACL-HLT 2016: 133-138, Association for Computational Linguistics.
    GII-GRIN rating: A-; CORE ranking: B; #citations: 0 (Scopus) 2 (Google Scholar)

23. Fabio Del Vigna, Marinella Petrocchi, Alessandro Tommasi, Cesare Zavattari, Maurizio Tesconi: Semi-supervised Knowledge Extraction for Detection of Drugs and Their Effects. In: Spiro E., Ahn YY. (eds) *Social Informatics*. SocInfo 2016: 494-509. Lecture Notes in Computer Science, vol. 10046. Springer, Cham.
    GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 6 (Google Scholar)

24. Claudio Caimi, Carmela Gambardella, Mirko Manea, Marinella Petrocchi, Debora Stella: Legal and

Technical Perspectives in Data Sharing Agreements Definition. In: Berendt B., Engel T., Ikonomou D., Le Metayer D., Schiffner S. (eds) *Privacy Technologies and Policy.* APF 2015: 178-192. Lecture Notes in Computer Science, vol 9484. Springer, Cham

GII-GRIN rating: N.A.; CORE ranking: N.A; #citations: 1 (Scopus) 6 (Google Scholar)

25. Zakaria Maamar, Gianpiero Costantino, Marinella Petrocchi, Fabio Martinelli: Business Reputation of Social Networks of Web Services. In *Mobile Systems and Pervasive Computing* MobiSPC 2015: Volume 56, 2015, Pages 18-25, Elsevier

GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 1 (Google Scholar)

26. Alessandro Colantonio, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi: Visual detection of singularities in review platforms. In *Symposium of Applied Computing* SAC 2015: 1294-1295, ACM. ISBN: 978-1-4503-3196-8.

GII-GRIN rating: B; CORE ranking: B; #citations: 1 (Scopus) 1 (Google Scholar)

27. Rocco De Nicola, Alessandro Maggi, Marinella Petrocchi, Angelo Spognardi, Francesco Tiezzi: Twit-lang(er): Interactions Modeling Language (and Interpreter) for Twitter. In: Calinescu R., Rumpe B. (eds) *Software Engineering and Formal Methods.* SEFM 2015. Lecture Notes in Computer Science, vol 9276, 327-343. Springer, Cham.

GII-GRIN rating: B–; CORE ranking: B; #citations: 0 (Scopus) 2 (Google Scholar)

28. Alessandro Colantonio, Roberto Di Pietro, Marinella Petrocchi, Angelo Spognardi: VISIO: A Visual Approach for Singularity Detection in Recommendation Systems. In: Fischer-Hubner S., Lambrinoudakis C., Lopez J. (eds) *Trust, Privacy and Security in Digital Business* TrustBus 2015: 33-47. Lecture Notes in Computer Science, vol 9264. Springer, Cham.

GII-GRIN rating: N.A.; CORE ranking: B; #citations: 0 (Scopus) 1 (Google Scholar)

29. Mauro Conti, Vittoria Cozza, Marinella Petrocchi, Angelo Spognardi: TRAP: Using Targeted ads to unveil Google personal profiles. In *Information Forensics and Security* WIFS 2015: 1-6, IEEE

GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 5 (Google Scholar)

30. Van Tien Hoang, Angelo Spognardi, Francesco Tiezzi, Marinella Petrocchi, Rocco De Nicola: Domain-specific queries and Web search personalization: some investigations. In *Automated Specification and Verification of Web Systems* WWV 2015: 51-58, EPTCS

GII-GRIN rating: N.A.; CORE ranking: N.A.; #citations: 0 (Scopus) 0 (Google Scholar)

31. Ilaria Matteucci, Paolo Mori, Marinella Petrocchi: 1st International Workshop on TEchnical and LEgal aspects of data pRIvacy and Security (TELERISE 2015): Preface. In *Intl. Conference on Software Engineering*, ICSE (2) 2015: 1015-1016.

GII-GRIN rating: A++; CORE ranking: A*; #citations: 0 (Scopus) 0 (Google Scholar)

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   3. Gabriele Lenzini and Marinella Petrocchi (editors): Proceedings of the European Context Awareness and Trust 2009 (EuroCAT09), 3rd Workshop on Combining Context with Trust, Security, and Privacy, CEUR Workshop Proceedings, vol. 504, 2009. (ISSN 1613-0073).

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   2. Zheng Yan, Peter Mueller, Xinyi Huang, Xiangjian Sean He, Marinella Petrocchi (editors): International Journal of Information Security and Privacy (IJISP) - Special Issue on Trust, Security, and Privacy in Computing and Communications (Part 1), IGI-Global, volume 9, number 2, April-June 2015 (2015) Online:
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Datasets: The project MIB (*My Information Bubble*) - of which I am coordinator and scientific manager - has produced two datasets of Twitter accounts, made available to the scientific community for research purposes:

1. dataset made up of both genuine accounts and spambots. The dataset is annotated, as described in our paper: "The paradigm-shift of social spambots: Evidence, theories, and tools for the arms race", WWW 2017, 3-7 April 2017, Perth, Australia;

2. dataset consisting of genuine accounts and Twitter fake followers, as described in our paper: "Fame for sale: Efficient detection of fake Twitter followers", Decision Support Systems, Volume 80, 2015.

The two datasets are described in - and obtainable from - this page: mib.projects.iit.cnr.it/dataset.html

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Declaration (in Italian): La sottoscritta è a conoscenza che, ai sensi dell'art.26 della legge15/68, le dichiarazioni mendaci, la falsità negli atti e l'uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali. Ai sensi dell'art. 13 del Regolamento UE 2016/679, la sottoscritta autorizza al trattamento dei dati personali presenti nel CV.

Pisa, June 25, 2019   Marinella Petrocchi