

Angelo Spognardi

Curriculum Vitae

Dipartimento di Informatica
Sapienza Università di Roma
v.le Regina Elena, 295
Palazzina G, piano 2, stanza G29
00161 Roma, Italia


Data di nascita: 

INTERESSI DI RICERCA

La mia principale area di interesse è la sicurezza informatica. Gli argomenti attuali includono: rilevamento di anomalie nelle piattaforme di social media, Machine Learning e AI applicata alla cybersecurity, sicurezza dei dati, dei computer e delle reti, sicurezza dell'IoT, IPv6

POSIZIONE ATTUALE

Da Marzo 2020 **Professore Associato**, Dipartimento di Informatica, Sapienza Università di Roma, v.le Regina Elena, 295, 00161 Roma, Italia.

POSIZIONI PRECEDENTI

Mar 2017–Mar 2020 **Professore Aggregato**, RTD-B (DL n. 240/2010, art. 24, comma 5, letter b), Dipartimento di Informatica, Sapienza Università di Roma, via Salaria 113, 00198 Roma, Italia.

Ago 2015–Giu 2017 **Assistant Professor**, Technical University of Denmark, Department of Applied Mathematics and Computer Science, Richard Petersens Plads, 2800 Kgs. Lyngby, Denmark.
Network Security

Feb 2015–Mar 2016 **Adjunct professor and Guest Scholarship**, IMT Scuola di alti studi Lucca, Piazza S. Ponziano, 6, 55100 Lucca, Italy, Promoter: prof. Rocco De Nicola.
Docente corso dottorato

Nov 2012–Ago 2015 **Postdoc**, Istituto di Informatica e Telematica CNR, Via G. Moruzzi, 1, 56124 Pisa, Italy, Promoter: eng. Marinella Petrocchi.
Progetti MyChoice e MIB

Giu 2010–Giu 2012 **Postdoc**, Dipartimento di Informatica, Sapienza Università di Roma, via Salaria 113, 00198 Roma, Italia, Promoter: prof. Luigi V. Mancini.
Progetto ExTraBIRE

Apr 2009–Mar 2010 **Postdoc**, Dipartimento di Informatica, Sapienza Università di Roma, via Salaria 113, 00198 Roma, Italia, Promoter: prof. Alessandro Mei.
Sicurezza nelle UWSN, Unattended Wireless Sensor Networks

Dic 2007–Dic 2008 **Postdoc**, INRIA Rhône-Alpes: Institut national de recherche en informatique et en automatique, 655 Avenue de l'Europe, Montbonnot, 38334 Saint Ismier Cedex Grenoble, France, Promoter: prof. Claude Castelluccia.
Progetto European (STREP) UBISEC

FORMAZIONE

Nov 2004–Mar 2008 **Dottorato in Informatica**, Dipartimento di Informatica, Sapienza Università di Roma, via Salaria 113, 00198 Roma, Italia, Advisor: prof. Luigi V. Mancini.
Titolo della tesi: "Secure protocols for resource-constrained devices"

Set 1997–Set 2004 **Laurea Vecchio Ordinamento in Informatica, cum laude**, *Dipartimento di Informatica, Sapienza Università di Roma*, via Salaria 113, 00198 Roma, Italia, Advisor: prof. Luigi V. Mancini.
Titolo della tesi: "BaRT, Balanced Randomic Tree - Un protocollo scalabile e distribuito per lookup in reti peer-to-peer"

PUBBLICAZIONI

Riviste

- [J23] **Reducing the False Negative Rate in Deep Learning Based Network Intrusion Detection Systems**, with J. Mijalkovic. In Algorithms Volume 15, Number 8: August 2022, **best paper award 2023**
- [J22] **Adversarial Machine Learning for Protecting Against Online Manipulation**, with S. Cresci, M. Petrocchi, S. Tognazzi. In IEEE Internet Computing Volume 26, Number 2, March-April 2022, pp. 47-52
- [J21] **The coming age of adversarial social bot detection**, with S. Cresci, M. Petrocchi, S. Tognazzi. In First Monday Volume 26, Number 6 - 7 June 2021
- [J20] **Emergent Properties, Models, and Laws of Behavioral Similarities within Groups of Twitter Users**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In Elsevier Computer Communications Volume 150, 15 January 2020, pp. 47-61
- [J19] **On the capability of evolved spambots to evade detection via genetic engineering**, with S. Cresci, M. Petrocchi, S. Tognazzi. In Elsevier Online Social Networks and Media, 9C (2019) pp. 1-16
- [J18] **Social fingerprinting: detection of spambot groups through DNA-inspired behavioral modeling**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In IEEE Transactions on Dependable and Secure Computing (TDSC) - ISSN:1545-5971 vol. 15 (4), pp.561-576.
- [J17] **Analysis and Evaluation of SafeDroid v2.0, a Framework for Detecting Malicious Android Applications**, with N. Dragoni and M. Argyriou. In Security and Communication Networks Journal, Volume 2018, Article ID 4672072, September 2018.
- [J16] **DDoS-Capable IoT Malwares: Comparative Analysis and Mirai Investigation**, with M. De Donno, N. Dragoni and A. Giarretta. In Security and Communication Networks Journal, Volume 2018, Article ID 7178164, February 2018.
- [J15] **A Study on Text-Score Disagreement in Online Reviews**, with M. Fazzolari, V. Cozza and M. Petrocchi, In Springer Cognitive Computation, Volume 9(5), pages. 689-701, October 2017.
- [J14] **A language-based approach to modelling and analysis of Twitter interactions**, with A. Maggi, M. Petrocchi and F. Tiezzi. In Elsevier Journal of Logical and Algebraic Methods in Programming, Volume 87 February 2017 Pages 67-91.
- [J13] **DNA-Inspired Online Behavioral Modeling and Its Application to Spambot Detection**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In IEEE Intelligent Systems, Volume 31 Issue 5 September-October 2016.
- [J12] **Social Fingerprinting - or the Truth About You**, with S. Cresci, R. Di Pietro, M. Petrocchi and M. Tesconi. In ERCIM News Special theme: Cybersecurity., Vol 106 July 2016.
- [J11] **Bioinspired Security Analysis of Wireless Protocols**, with M. Petrocchi, P. Santi. In Mobile Networks and Applications, Volume 21 Issue 1 February 2016 pages 139-148.
- [J10] **Fame for sale: efficient detection of fake Twitter followers**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In Elsevier Decision Support Systems, Volume 80 December 2015 pages 56-71.
- [J09] **Hacking smart machines with smarter ones: How to extract meaningful data from machine learning classifiers**, with G. Ateniese, L. V. Mancini, D. Vitali, A. Villani, G. Felici. In Inderscience International Journal on Security and Networks, January 2015 Vol 10 Issue 3 pages137-150.

- [J08] **Large-Scale Traffic Anomaly Detection: Analysis of Real Netflow Datasets**, with D. Vitali, A. Villani, R. Battistoni and L. V. Mancini. In Springer E-Business and Telecommunications: Communications in Computer and Information Science, 2014. LNCS 455, September 2014 pages 192-208.
- [J07] **Discriminating Between the Wheat and the Chaff in Online Recommendation Systems**, with R. Di Pietro, M. Petrocchi and M. Tesconi. In ERCIM News Special theme: Linked Open Data., Vol 96 January 2014
- [J06] **Clone Wars: Distributed Detection of Clone Attack in Mobile WSNs**, with M. Conti, R. Di Pietro. In Elsevier Journal of Computer and System Sciences, special issue on Wireless Networks Intrusion, Vol 80 Issue 3 April 2013 pages 654-669.
- [J05] **Intrusion-resilient Integrity in Data-Centric Unattended WSNs**, with R. Di Pietro, C. Soriente, G. Tsudik. In Elsevier Pervasive and Mobile Computing., Volume 7 Issue 4 August 2011 pages 495-508.
- [J04] **Who counterfeited my Viagra? (Probabilistic item removal detection via RFID tag cooperation)**, with M. Conti, R. Di Pietro. In EURASIP Journal on Wireless Communications and Networking, special issue on Security and Resilience for Smart Devices and Applications. , Volume 2011 (2011).
- [J03] **eRIPP-FS: Enforcing Privacy and Security in RFID**, with M. Conti, R. Di Pietro, L. V. Mancini. In Wiley-Blackwell Security and Communication Networks Journal., Volume 3 Issue 1 January/February 2010 pages 58-70.
- [J02] **Playing Hide-and-Seek with a Focused Mobile Adversary in Unattended Wireless Sensor Networks**, with R. Di Pietro, L. V. Mancini, C. Soriente, G. Tsudik. In Elsevier Journal Ad-Hoc Networks., Volume 7 Issue 8 November 2009 pages 1463-1475.
- [J01] **Data Security in Unattended Sensor Networks**, with R. Di Pietro, L. V. Mancini, C. Soriente, G. Tsudik. In IEEE Transactions on Computers, Special Issue on Autonomic Network Computing., Volume 58 Issue 11 November 2009 pages 1500-1511.

Pubblicazioni in conferenze

- [C44] **A New Model for Testing IPv6 Fragment Handling**, with E. Bassetti and E. Di Paolo. In Proceedings of the 28th European Symposium on Research in Computer Security (ESORICS). 25-27 September 2023, The Hague, The Netherlands.
- [C43] **From Online Behaviours to Images: A Novel Approach to Social Bot Detection**, with E. Di Paolo and M. Petrocchi. In Proceedings of International Conference On Computational Science 2023. 3-5 July, 2023, Prague, Czech Republic.
- [C42] **Security assessment of common open source MQTT brokers and clients**, with E. Bassetti and E. Di Paolo. In Proceedings of 5th Italian conference on Cybersecurity (ITASEC21). 4-7 April 2021, online.
- [C41] **On the robustness of rating aggregators against injection attacks**, with M. Petrocchi. In Proceedings of 2nd Multidisciplinary International Symposium on Disinformation in Open Online Media (MISDOOM2020). October 26-27, 2020, Leiden, The Netherlands, online.
- [C40] **Better Safe than Sorry: an adversarial approach to improve social bot detection**, with S. Cresci, M. Petrocchi, S. Tognazzi. In Proceedings of 10th ACM Conference on Web Science (WebSci '19). June 30-July 03, 2019, Boston, Massachusetts, USA.
- [C39] **Predicting Online Review Scores Across Reviewer Categories**, with M. Fazzolari and M. Petrocchi. In Proceedings of 19th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL). 21-23 November 2018, Madrid, Spain.
- [C38] **From Reaction to Proaction: Unexplored Ways to the Detection of Evolving Spambots**, with S. Cresci, M. Petrocchi and S. Tognazzi. Online Social Networks and Media, Event co-located with The Web Conference, 24 April 2018, Lyon, France. WWW Companion Volume 2018: 1469-1470.

- [C37] **Mining implicit data association from tripadvisor hotel reviews**, with V. Cozza, M. Fazzolari and M. Petrocchi. DARLI-AP 2018, co-located with EDBT/ICDT 2018 Joint Conference, Wien, March 26, 2018. Published by CEUR Workshop Proceedings.
- [C36] **DNA Fingerprinting: a nature-inspired technique for spambot detection**, with S. Cresci, R. Di Pietro, M. Petrocchi, and M. Tesconi. In 2nd Italian Conference on Cybersecurity ITASEC 2018. 6-9 February 2018, Milan, Italy.
- [C35] **Exploiting digital DNA for the analysis of similarities in Twitter behaviours**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In 4th IEEE International Conference on Data Science and Advanced Analytics - DSAA2017, 19-21 October 2017, Tokyo Japan.
- [C34] **Analysis of DDoS-Capable IoT Malwares**, with M. De Donno, N. Dragoni and A. Giaretta. In Proceedings of 1st IEEE International Conference on Security, Privacy, and Trust (INSERT), 3-6 September 2017, Prague, Czech Republic.
- [C33] **A Taxonomy of Distributed Denial of Service Attacks**, with M. De Donno, N. Dragoni and A. Giaretta. In Proceedings of the International Conference on Information Society (i-Society), 2017, IEEE.
- [C32] **Security Flaws in OAuth 2.0 Framework: A Case Study**, with M. Argyriou and N. Dragoni. In proceedings of 3rd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity (TELERISE 2017), 12 September 2017 Trento Italy.
- [C31] **The paradigm-shift of social spambots: Evidence, theories, and tools for the arms race**, with S. Cresci, R. Di Pietro, M. Petrocchi, M. Tesconi. In proceedings of the 26th International World Wide Web Conference, 2017 (WWW'2017) alt-track on WebSci, 3-7 April 2017 Perth Australia.
- [C30] **Security And Privacy Issues in Healthcare Monitoring Systems: A Case Study**, with D. T. Handler, L. Hauge and N. Dragoni. In proceedings of 10th International Conference on Health Informatics (HEALTHINF 2017) at BIOSTEC 2017, 21-23 February 2017 Porto Portugal.
- [C29] **SafeDroid: A Distributed Malware Detection Service for Android**, with R. Goyal, N. Dragoni and M. Argyriou. In proceedings of 9th IEEE International Conference on Service-Oriented Computing and Applications (IEEE SOCA 2016), 4-6 November 2016 Macau China.
- [C28] **A matter of words: NLP for quality evaluation of Wikipedia medical articles**, with V. Cozza, M. Petrocchi. In proceedings of 16th International Conference on Web Engineering (ICWE2016), June 6-9 2016 Lugano Switzerland.
- [C27] **Evaluation of Professional Cloud Password Management Tools**, with D. Schougaard, N. Dragoni. In proceedings of 2nd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity (TELERISE 2016), June 6-9 2016 Lugano Switzerland.
- [C26] **Experimental measures of news personalization in Google News**, with V. Cozza, V. T. Hoang, M. Petrocchi. In proceedings of 2nd International Workshop on Mining the Social Web (SoWeMine 2016), June 6-9 2016 Lugano Switzerland.
- [C25] **Mind The Tracker You Wear - A Security Analysis of Wearable Health Trackers**, with R. Goyal, N. Dragoni. In proceedings of 31th ACM/SIGAPP Symposium On Applied Computing, Health-Healthcare (ACM SAC 2016), April 4-8 2016 Pisa Italy.
- [C24] **TRAP: using TaRgeted Ads to unveil Google personal Profiles**, with M. Conti, V. Cozza, M. Petrocchi. In proceedings of the 7th IEEE International Workshop on Information Forensics and Security (IEEE WIFS 2015), November 16-19 2015 Rome Italy.
- [C23] **VISIO: Visual Approach for Singularity Detection in Recommendation Systems**, with A. Colantonio, R. Di Pietro, M. Petrocchi. In proceedings of 12th International Conference on Trust, Privacy & Security in Digital Business (TrustBus 2015), September 2015, Valencia, Spain.
- [C22] **Twitlang(er): interactions modeling language (and interpreter) for Twitter**, with R. De Nicola, A. Maggi, M. Petrocchi, F. Tiezzi. In proceedings of 13th International Conference on Software Engineering and Formal Methods (SEFM 2015), September 2015 York United Kingdom.

- [C21] **Domain-specific queries and Web search personalization: some investigations**, with V. T. Hoang, R. De Nicola, F. Tiezzi, M. Petrocchi. In proceedings of 11th Workshop on Automated Specification and Verification of Web Systems (WWV 2015)., June 2015 Oslo Norway
- [C20] **Visual Detection of Singularities in Review Platforms**, with A. Colantonio, R. Di Pietro, M. Petrocchi. In proceedings of 30th ACM/SIGAPP Symposium On Applied Computing - Multimedia & Visualization (ACM SAC 2015, MMV)., April 2015 Salamanca Spain (poster)
- [C19] **Cryptofraglets reloaded: Bioinspired Security Modeling of a RFID Protocol and Properties**, with M. Petrocchi, P. Santi. In proceedings of 8th International Conference on Bio-inspired Information and Communications Technologies (formerly BIONETICS), Bio-inspired Wireless Network Security., December 2014 Boston Massachusetts USA.
- [C18] **Improved Automatic Maturity Assessment of Wikipedia Medical Articles**, with R. Conti, E. Marzini, I. Matteucci, P. Mori, M. Petrocchi. In proceedings of 13th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2014), October 2014 Amantea Italy.
- [C17] **A Lot of Slots (outliers confinement in review-based systems)**, with R. Di Pietro, M. Petrocchi. In proceedings of 15th International Conference on Web Information System Engineering (WISE 2014), October 2014 Thessaloniki Greece.
- [C16] **A Criticism to Society (as seen by Twitter analytics)**, with S. Cresci, R Di Pietro, M. Petrocchi, M. Tesconi. In the First International Workshop on Big Data Analytics for Security (DASec), June 2014 Madrid Spain.
- [C15] **No NAT'd User left Behind: Fingerprinting Users behind NAT from NetFlow Records alone**, with N. Verde, E. Gabrielli, G. Ateniese, L. V. Mancini. In 34th International Conference on Distributed Computing Systems (ICDCS 2014), June 2014 Madrid Spain.
- [C14] **Maturity assessment of Wikipedia medical articles**, with R. Conti, E. Marzini, I. Matteucci, P. Mori, M. Petrocchi. In 27th International Symposium on Computer-Based Medical Systems (CBMS 2014), May 2014 New York USA.
- [C13] **DDoS detection with information theory metrics and netflows: a real case**, with D. Vitali, A.Villani, R. Battistoni and L. V. Mancini. In 9th International Conference on Security and Cryptography (Secrypt 2012), July 2012 Rome Italy.
- [C12] **Relieve Internet Routing security of Public Key Infrastructure**, with C. Soriente, D. Vitali, A. Villani and L. V. Mancini. In 21th IEEE International Conference on Computer Communication Networks (ICCCN 2012), July 2012 Munich Germany.
- [C11] **Wireless Sensor Replica Detection in Mobile Environments**, with M. Conti, R. Di Pietro. In 13th International Conference On Distributed Computing And Networking (ICDCN 2012), January 2012, Hong Kong China.
- [C10] **MhRep: Multi-hop Replication Scheme for Data Survival in Unattended Wireless Sensor Networks**, with D. Vitali, L. V. Mancini and A. Villani. In Dependable Network Computing and Mobile Systems (IEEE DNCMS 2011), October 2011, Madrid Spain.
- [C09] **Replication schemes in Unattended Sensor Networks**, with L. V. Mancini, D. Vitali. In New Technology, Mobility and Security (IFIP NTMS 2011) – Security Track, February 2011 Paris France.
- [C08] **Collaborative Authentication in Unattended Sensor Networks**, with R. Di Pietro, C. Soriente, G. Tsudik. In ACM Conference on Wireless Network Security (ACM WiSec'09), March 2009 Zurich Swiss.
- [C07] **Catch Me (If You Can): Data Survival in Unattended Sensor Networks**, with R. Di Pietro, L. V. Mancini, C. Soriente, G. Tsudik. In IEEE International Conference on Pervasive Computing and Communications (IEEE PerCom'08), March 2008 Hong Kong.
- [C06] **FastRIPP: RFID Privacy Preserving protocol with Forward Secrecy and Fast Resynchronization**, with M. Conti, R. Di Pietro, L. V. Mancini. In 33th Annual Conference of the IEEE Industrial Electronics Society (IEEE IECON '07), November 2007 Taipei Taiwan.

- [C05] **RoK: a Robust Key Pre-distribution Protocol for Multi-Phase Wireless Sensor Networks**, with C. Castelluccia. In 3rd International Conference on Security and Privacy in Communication Networks (IEEE SecureComm '07), September 2007 Nice France.
- [C04] **RIPP-FS: an RFID Identification, Privacy Preserving protocol with Forward Secrecy**, with M. Conti, R. Di Pietro, L. V. Mancini. In 4th IEEE International Workshop on Pervasive Computing and Communication Security (IEEE PerSec '07 - PerCom '07), March 2007 New York USA.
- [C03] **A Formal Framework for the performance analysis of P2P networks protocols**, with R. Di Pietro. In 3rd International Workshop On Hot Topics in Peer-to-Peer Systems (IEEE Hot-P2P '06), April 2006, Rhodes, Greece.
- [C02] **A methodology for P2P file-sharing traffic detection**, with A. Lucarelli, R. Di Pietro. In 2nd International Workshop on Hot Topics in Peer-to-Peer Systems (IEEE Hot-P2P '05), July 2005, San Diego, California USA.
- [C01] **BaRT, Balanced Randomized Tree: A scalable and distributed protocol for lookup in peer-to-peer networks**, with R. Di Pietro, L. V. Mancini. In 1st International Workshop on Hot Topics in Peer-to-Peer Systems (IEEE Hot-P2P '04), October 2004, Volendam, Holland.

Capitoli di libri e collezioni

- [B03] **Proceedings of Applied Cryptography and Network Security – 18th International Conference, ACNS 2020**, Rome, Italy, October 19–22, 2020, with M. Conti, J. Zhou, E. Casalicchio. Lecture Notes in Computer Science 12146, Springer 2020, ISBN 978-3-030-57807-7
- [B02] **Contributions from ADBIS 2018 Workshops. ADBIS (Short Papers and Workshops) 2018**, with U. Bub, A. Dahanayake, J. Darmont, C. Diamantini, F. Fassetti, E. Fermé, N. Kabachi, I. Matteucci, B. Molnár, S. Navathe, E. Oro, M. Petrocchi, S. E. Rombo, M. Ruffolo, B. Thalheim, D. Ursino
- [B01] **Advanced Multimodal Frameworks to Support Human-Computer Interaction on Social Computing Environments**, with D. Avola, A. Del Buono. In IGI Global Handbook of Research on Social Computing Theory And Practice: Interdisciplinary Approaches, 2011.

Tesi

- [T01] **Secure protocols for resource-constrained devices**, In VDM Verlag Dr Müller Aktiengesellschaft & Co. KG., 2010

BIBLIOMETRICS

H-Index **24**, *Google Scholar*, Febbraio 2024.
 Citations **3801**, *Google Scholar*, Febbraio 2024.

FINANZIAMENTI

- 2021-2024 **Prebunking: predicting and mitigating coordinated inauthentic behaviors in social media.**, Progetto di Ateneo, Sapienza Università di Roma, Italia, Principal investigator.
- 2020-2024 **Gen4olive**, H2020-EU.3.2.1.1, grant 101000427, partecipante del gruppo di ricerca Sapienza.
- 2020-2023 **Secure and Privacy-Preserving Contact Tracing (SPECTRA)**, Progetto di Ateneo, Sapienza Università di Roma, Italia, partecipante e co-investigatore.
- 2019-2022 **SmartDefense: Models, Algorithms and Mechanisms for Reducing Cyber Risks in Smart Industry**, Progetto di Ateneo, Sapienza Università di Roma, Italia, partecipante e co-investigatore.
- 2017-2021 **Unavox – National Cyber Range**, Piano Nazionale di Ricerca Militare (PNRM), coordinatore e responsabile scientifico del gruppo di ricerca Sapienza.
- 2014-2015 **My Information Bubble – MIB project**, progetto finanziato da Registro.it, co-investigatore.
- 2012-2014 **MyChoice project**, progetto finanziato dalla Regione Toscana, co-investigatore

2010-2012 **Progetto europeo ExTraBIRE (2010-2012)**, European Commission – Directorate-General Home Affairs HOME/2009/CIPS/AG/C2-065, responsabile del Work Package WP3000 e co-investigatore per gli altri Work Package.

COMMISSIONI

Incarichi **Membro del Consiglio di Area didattica**, Dipartimento di Informatica, Sapienza Università di Roma, Italia.

Membro del Collegio del dottorato in Cybersecurity e Data Science, Sapienza Università di Roma, Italia.

Membro della commissione per la selezione degli studenti internazionali, per il corso in Cybersecurity, Sapienza Università di Roma, Italia.

Membro della commissione per i piani di studio, per i corsi di laurea in Informatica e Applied Computer Science and Artificial Intelligence, Dipartimento di Informatica, Sapienza Università di Roma, Italia.

General co-chair della conferenza ACNS 2022, 20th International Conference on Applied Cryptography and Network Security, 21-24 Giugno 2022, Roma, Italia.

General co-chair della conferenza ACNS 2020, 18th International Conference on Applied Cryptography and Network Security, 22-25 Giugno 2020, Rome, Italy.

General co-chair del workshop TELERISE 2018, 4th International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, 2-5 Settembre 2018, Budapest, Hungary.

Attività editoriali **Editor associato della rivista**, IEEE Transaction on Information Forensics and Security

Membro del comitato editoriale per le riviste, Elsevier Computer Communications, Frontiers in Big Data: Cybersecurity and Privacy, KSII Transactions on Internet and Information Systems

Membro del comitato di Programma per le conferenze ESORICS 2024, WiMob 2023, ESORICS 2023, TheWebConf 2023, ICC-CISS 2023, ANT 2023, AAI-23, CANS 2022, EUSPN 2022, ACNS 2022, CANS 2021, SPIoT 2021, EUSPN 2021, ANT 2021, SPIoT 2020, EUSPN 2020, STM 2020, ANT 2020, EUSPN 2019, UBICOMM 2019, IFIP SEC 2019, SDS-2019, ANT 2019, SPIoT 2018, CYBER 2018, UBICOMM 2018, EUSPN 2018, ANT 2018, CYBER 2017, UBICOMM 2017, DSAA 2017, IEEE CNS 2017 - SPA, MSE Workshop of SEFM 2017, WiSec 2017, ANT-2017, ICISSP 2017, CCNC 2017, ODBASE 2016, EUSPN 2016, ANT 2016, ICISSP 2016, ODBASE 2015, ANT 2014, Securecomm 2013, ANT 2013, Securecomm 2012, WiSec 2012

Revisore esterno per le più prestigiose conferenze e riviste in cybersecurity fra cui ACM CCS, IEEE S&P, IEEE Transactions on Information Forensics & Security, and for EU projects (H2020).

INSEGNAMENTI

Dipartimento di Informatica, Sapienza Università di Roma

2022-oggi **Cybersecurity**, docente responsabile, laurea triennale in Applied Computer Science and Artificial Intelligence

2020-oggi **Programming Lab**, docente responsabile, laurea triennale in Applied Computer Science and Artificial Intelligence

2018-oggi **Practical Network Defense**, docente responsabile, laurea magistrale in Cybersecurity

2019-2020 **Web in-security: common pitfalls and remedies in web 2.0.**, docente responsabile, PhD in Data Science

2017-2022 **Fondamenti di programmazione**, docente responsabile delle esercitazioni, laurea triennale in Informatica

2017-2018 **Cloud Computing**, docente responsabile, laurea magistrale in Data Science

- 2010-2013 **Introduzione alla sicurezza informatica**, docente responsabile, postgraduate diploma class, Master universitario Sicurezza dei Sistemi e delle Reti Informatiche per l'Impresa e la Pubblica Amministrazione
- 2009-2012 **Sistemi Operativi**, teaching assistant, laurea triennale in Informatica
- 2008-2009 **Laboratorio di Sistemi Operativi**, adjunct professor, laurea triennale in Informatica
- 2005-2007 **Programmazione 1 e 2**, teaching assistant, laurea triennale in Informatica
[Institute for Mathematics and Computer Science, DTU, Technical University of Denmark](#)
- 2015-2018 **02233 Network Security**, docente responsabile, laurea magistrale Compute
- 2015-2017 **02234 Current topics in System Security**, co-docente responsabile, M.Sc. Compute
- 2015-2017 **02190 IT-Security and Health**, docente responsabile, B.Sc. Compute
[IMT Scuola Alti Studi, Lucca](#)
- 2014-2015 **Principles of Network Security**, docente responsabile, PhD in Computer Science
[Dipartimento di Matematica, Università di Roma Tre, Roma, Italia](#)
- 2009-2010 **Tecniche Informatiche Avanzate**, co-docente responsabile, laurea triennale in Matematica
- 2006-2007 **Tecniche Informatiche Avanzate**, co-docente responsabile, laurea triennale in Matematica
[Università degli studi del Molise, Campobasso, Italia](#)
- 2009-2012 **European Computer Driving License**, docente responsabile, C.A.D.R.I.
- 2009-2010 **Tecniche Informatiche Avanzate**, docente responsabile, Master universitario in Sicurezza Informatica e Informatica Forense

SUPERVISIONE STUDENTI

- PhD mentor Edoardo Di Paolo, Enrico Bassetti, Dipartimento di Informatica, Sapienza Università di Roma, Italia.
- BSc/MSc Advisor Docente relatore 90 studenti triennali e magistrali.

RICONOSCIMENTI

- 2023 MDPI Algorithms Best Paper Award of the year, Reducing the False Negative Rate in Deep Learning Based Network Intrusion Detection Systems
- 2015 Honorable mention award ACM SAC 2015, MMV: Visual Detection of Singularities in Review Platforms
- 2009 Featured article November 2009 IEEE Transaction on Computers: Data Security in Unattended Sensor Networks

INTERVENTI

- 2021 **CyRCLe: A Cyber Range for continuous learning**, Workshops CyberRange.IT of ITASEC 21, online.
- 2019 **Improving social bot detection with an Adversarial Machine Learning approach**, TOFFEE 2019, 1st TOFFEE (TOol for Fighting FakEs) workshop. 24-25 October 2019, Lucca, Italy.
- 2017 **Security Flaws in OAuth 2.0 Framework: A Case Study**, TELERISE 2017, 3rd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, 12 September 2017, Trento Italy.
- 2016 **SafeDroid: A Distributed Malware Detection Service for Android**, IEEE SOCA 2016, 9th IEEE International Conference on Service-Oriented Computing and Applications, 04-06 November 2016, Macau China.

- Evaluation of Professional Cloud Password Management Tools**, TELERISE 2016, 2nd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity, 06 June 2016, Lugano, Swiss.
- Energy harvesting sensors: security challenges**, invited talk at Computer World IoT Conference. 07 June 2016, Århus, Denmark
- 2015 **Domain-specific queries and Web search personalization: some investigations**, WWW 2015, 11th Workshop on Automated Specification and Verification of Web Systems, 23 June 2015, Oslo, Norway.
- Visual Detection of Singularities in Review Platforms**, ACM SAC 2015, 30th ACM/SIGAPP Symposium On Applied Computing, 13-17 April 2015, Salamanca, Spain.
- 2014 **Improved Automatic Maturity Assessment of Wikipedia Medical Articles**, ODBASE 2014, 13th International Conference on Ontologies, DataBases, and Applications of Semantics, 27-31 October 2014, Amantea Italy.
- A Lot of Slots: outliers confinement in review-based systems**, WISE 2014, 15th International Conference on Web Information System Engineering, 12-14 October 2014 Thessaloniki, Greece.
- No NAT'd User left Behind: Fingerprinting Users behind NAT from NetFlow Records alone**, ICDCS 2014, 34nd International Conference on Distributed Computing Systems, 30 June-03 July 2014, Madrid, Spain.
- 2012 **Internet routing issues and possible mitigation**, "Conferenza del progetto Europeo ExTrABIRE" - Exchanged Traffic Analysis for a Better Internet Resiliency in Europe, 18 June 2012, Rome, Italy.
- Wireless sensor replica detection in mobile environment**, ICDCN 2012, 13th international conference on Distributed Computing and Networking, 03-06 January 2012, Hong Kong, China.
- 2011 **MhRep: Multi-hop Replication Scheme for Data Survival in Unattended Wireless Sensor Networks**, IEEE DNCMS 2011, 4th International Workshop on Dependable Network Computing and Mobile Systems, 07 October 2011, Madrid, Spain.
- ExTrABIRE Project: Network Simulator Design and Attack Modeler**, "Security of Internet and critical infrastructures: European experiences", 13 June 2011, Rome, Italy.
- Replication schemes in Unattended Sensor Networks**, IFIP NTMS 2011, 4th New Technology, Mobility and Security, 07-10 February 2011, Paris, France.
- 2005 **A methodology for P2P file-sharing traffic detection**, IEEE Hot-P2P '05, 2nd International Workshop on Hot Topics in Peer-to-Peer Systems, 21 June 2005 San Diego, California, USA.
- 2004 **BaRT, Balanced Randomized Tree: A scalable and distributed protocol for lookup in peer-to-peer networks**, IEEE Hot-P2P '04, 1st International Workshop on Hot Topics in Peer-to-Peer Systems, 08 October 2004 Volendam, The Netherlands.

CERTIFICAZIONI

- 2010 **European Computer Driver License official supervisor** AICA, Associazione Italiana per l'Informatica ed il Calcolo Automatico
- ECDL-core**, AICA, Associazione Italiana per l'Informatica ed il Calcolo Automatico
- 2008 **CCNA e IT-Essential official teacher**, CISCO Network Academy

COMPUTER SKILLS

- Sistemi operativi** Microsoft Windows, GNU/Linux and others UNIX-like
- Linguaggi di programmazione** C/C++, Java, Python, javascript, ASP, PHP, bash, L^AT_EX
- Virtualizzazioni** VMWare, vSphere, Proxmox, Virtualbox

Analisi di sistema Kali linux, Caine, OS, DEFT, NST
Tool di scansione nmap, nessus, netscan, Metasploit, wireshark, aircrack-ng
Network scapy, socket TCP/IP and UDP, tcpdump, wireshark, netsniff-ng, nfdump, ntop, ngrep
Crypto openssl, PGP, GPG, veracrypt
Virtual Private Networks OpenVPN, IPsec, Wireguard
Database MySQL
Altro Cisco Packet Tracer, Inkscape, GIMP, Adobe Photoshop, MS Office e OpenOffice suite.

LINGUE STRANIERE

English Self-assessment (Common European Framework of Reference for Languages, CEFR).
Reading C2 (Proficient user).
Listening C2 (Proficient user).
Speaking C2 (Proficient user).
Writing C2 (Proficient user).

French Self-assessment (Common European Framework of Reference for Languages, CEFR).
Reading B2 (Independent user).
Listening B2 (Independent user).
Speaking B2 (Independent user).
Writing B1 (Independent user).

Danish Self-assessment (Common European Framework of Reference for Languages, CEFR).
Reading B1 (Independent user).
Listening A1 (Independent user).
Speaking A1 (Independent user).
Writing A1 (Independent user).

Autorizzo il trattamento dei dati personali presenti nel CV ai sensi del D.Lgs. 2018/101 e del GDPR (Regolamento UE 2016/679).

Data

Firma