

Alessio Merlo

Curriculum Vitæ

DIBRIS - University of Genoa

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Born: February 06, 1980—Savona, Italy

Nationality: Italian

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Current position

Assistant Professor (RTD-B), DIBRIS - University of Genoa

Areas of interest

Computer Security, Operating Systems, Distributed Systems.

Appointments held

- 2017 - 2020 *Fixed-term Assistant Professor (RTD-B)*, DIBRIS, University of Genoa, Italy, from Oct. 2017 to Sep. 2020.
- 2014 - 2017 *Fixed-term Assistant Professor (RTD-A)*, DIBRIS, University of Genoa, Italy, from Sept. 2014 to Aug. 2017.
- 2011 - 2014 *Fixed-term Assistant Professor*, E-Campus University, Novedrate, Italy, from Mar. 2011 to Aug. 2014.
- 2011-2014 *Research Associate*, DIBRIS, University of Genoa, Italy, from Mar. 2011 to Aug. 2014.
- 2010-2011 *Post-Doctoral Fellow*, DIST, University of Genoa, Italy, from Feb. 2010 to Feb. 2011.
- 2005-2011 *Research Associate*, IEIIT, National Research Council, Genoa, from Nov. 2005 to Mar. 2011.
- 2005-2010 *PhD. Student*, DISI, University of Genoa, Italy, from Jan. 2005 to Apr. 2010.
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Visiting researcher (2)

- NYIT 2015 New York Institute of Technology, New York, USA, from Sept. 2015 to Oct. 2015. Invitee: Prof. Paolo Gasti, NYIT.
- FBK 2010 Security & Trust Unit, Bruno Kessler Foundation, Trento, Italy, from Jun. 2010 to Sep. 2010. Invitee: Prof. Alessandro Armando, Security & Trust Unit.
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Education & Qualifications

- Apr. 2017 **Qualification for the role of Associate Professor** both in Computer Engineering (S.C. 09/H1) and in Computer Science (S.C. 01/B1), according to the Italian National Scientific Qualification Procedure ([ASN 2016-2018](#)).
- Apr. 2010 **PhD** in Computer Science, DISI, University of Genoa.
 - Dissertation Topic: *An Architectural Approach to the Management of Applications with QoS Requirements on Grid*. [[DISI 2010](#)]
 - Advisors: V. Gianuzzi (DISI), A. Clematis (IMATI-CNR), A. Corana (IEIIT-CNR)
- Dec. 2005 **Professional ICT Engineering Qualification**, University of Genoa, Genoa.
- Sept. 2005 **MSc** in Computer Science, *magna cum laude*, DISI, University of Genoa.
- Oct. 2003 **BSc** in Computer Science, *magna cum laude*, DISI, University of Genoa.
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Publications

Book (2)

- [ELS 2017](#) **A. Merlo**, M. Migliardi, S. Al-Haj Baddar. (Eds.) *Adaptive Mobile Computing: Advances in Processing of Mobile Data Sets*; Elsevier. ISBN: 9780128046036. Expected release: Aug. 2017.
- [IGI 2013](#) L. Caviglione, M. Coccoli, **A. Merlo** (Eds.) *Social Network Engineering for Secure Web Data and Services*; DOI: [10.4018/978-1-4666-3926-3](#), IGI-Global.
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Journal articles (30)

- [IEEE SP 2018](#) S. Al-Haj Baddar, **A. Merlo**, M. Migliardi. *Behavioral Anomaly Detection in Forensics Analysis*, in IEEE Security and Privacy, (accepted, to appear).
- [CCPE 2018](#) S. Limet, **A. Merlo**, L. Spalazzi, *HPC & Co strike back: Where are distributed paradigms heading toward?*, in Concurrency and Computation: Practice and Experience, DOI: [10.1002/cpe.4431](#).

- CS 2017 S. Al-Haj Baddar, **A. Merlo**, M. Migliardi, F. Palmieri. *Saving energy in aggressive intrusion detection through dynamic latency sensitivity recognition*, in *Computers & Security*, p. 1-15, ISSN: 0167-4048, DOI: [10.1016/j.cose.2017.12.003](https://doi.org/10.1016/j.cose.2017.12.003).
- TSCo 2017 S. Aonzo, **A. Merlo**, M. Migliardi, L. Oneto and F. Palmieri, *Low-Resource Footprint, Data-Driven Malware Detection on Android*, in *IEEE Trans. on Sustainable Computing*, vol. PP, no. 99, pp. 1-1. DOI: [10.1109/TSUSC.2017.2774184](https://doi.org/10.1109/TSUSC.2017.2774184)
- JoWUA 2017 M. Guerar, **A. Merlo**, M. Migliardi. *ClickPattern: A Pattern Lock System Resilient to Smudge and Side-channel Attacks*, in *Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications*, 5(2), pp. 64-78.
- FGCS 2017 M. Guerar, **A. Merlo**, M. Migliardi. *Completely Automated Public Physical test to tell Computers and Humans Apart: A usability study on mobile devices*, in *Future Generation Computer Systems*. DOI: [10.1016/j.future.2017.03.012](https://doi.org/10.1016/j.future.2017.03.012).
- TDSC 2016 M. Guerar, M. Migliardi, **A. Merlo**, M. Benmohammed, F. Palmieri, A. Castiglione. *Using Screen Brightness to Improve Security in Mobile Social Network Access*, in *IEEE Trans. on Dependable and Secure Computing*. DOI: [10.1109/TDSC.2016.2601603](https://doi.org/10.1109/TDSC.2016.2601603).
- FGCS 2016 G. Costa, **A. Merlo**, L. Verderame, A. Armando. *Automatic Security Verification of Mobile App Configurations*, in *Future Generation Computer Systems*, Elsevier. DOI: [10.1016/j.future.2016.06.014](https://doi.org/10.1016/j.future.2016.06.014).
- IGPL 2016 **A. Merlo**, M. Migliardi, E. Spadacini. *IPS-Based Reduction of Network Energy Consumption*, in *Logic Journal of the IGPL*, Oxford Press. DOI: [10.1093/jigpal/jzw053](https://doi.org/10.1093/jigpal/jzw053).
- PMC 2016 **A. Merlo**, G. Costa, L. Verderame, A. Armando. *Android vs. SEAndroid: an Empirical Assessment*, in *Pervasive & Mobile Computing*, Vol. 30, pp. 113-131, Elsevier. DOI: [10.1016/j.pmcj.2016.01.006](https://doi.org/10.1016/j.pmcj.2016.01.006).
- JHSN 2016 S. Al-Haj Baddar, **A. Merlo**, M. Migliardi, *Generating Statistical Insights into Network Behavior Using SKETURE*, *Journal of High Speed Networks*, Vol. 22, N. 1, pp. 65-76, IoS Press. DOI: [10.3233/JHS-160539](https://doi.org/10.3233/JHS-160539).
- JCS 2015 **A. Merlo**, M. Migliardi, P. Fontanelli, *Measuring and Estimating Power Consumption in Android to Support Energy-based Intrusion Detection*, *Journal of Computer Security*, 23(5):611-637, IoS Press. DOI: [10.3233/JCS-150530](https://doi.org/10.3233/JCS-150530).
- PMC 2015 **A. Merlo**, M. Migliardi, L. Cavaglione, *A Survey on Energy-Aware Security Mechanisms*, *Pervasive & Mobile Computing*, Vol. 24, pp. 77-90, Dec. 2015, Elsevier. DOI: [10.1016/j.pmcj.2015.05.005](https://doi.org/10.1016/j.pmcj.2015.05.005).
- IJIS 2015 A. Armando, G. Costa, **A. Merlo**, L. Verderame, *Modeling and Enforcing Bring Your Own Device Policies*, *International Journal of Information Security*, (2015) 14(2):123-140, Springer, DOI: [10.1016/j.ijis.2015.05.005](https://doi.org/10.1016/j.ijis.2015.05.005).

[10.1007/s10207-014-0252-y](https://doi.org/10.1007/s10207-014-0252-y).

- JoWUA
2014b A. Armando, G. Bocci, G. Chiarelli, G. Costa, G. De Maglie, R. Mammoliti, **A. Merlo**, *Mobile App Security Analysis with the MAVeriC Static Analysis Module*, Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications, (2014) 5(4):103-119.
- JoWUA
2014a S. Al-Haj Baddar, **A. Merlo**, M. Migliardi, *Anomaly Detection in Computer Networks: A State-of-the-Art Review*, Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications, (2014) 5(4):29-64.
- IJCIP
2014 A. Armando, **A. Merlo**, L. Verderame, *Security considerations related to the use of mobile devices in the operation of critical infrastructures*, International Journal of Critical Infrastructure Protection, (2015) 7(4):247-256, Elsevier, DOI: [10.1016/j.ijcip.2014.10.002](https://doi.org/10.1016/j.ijcip.2014.10.002).
- Computer
2014 A. Armando, G. Costa, **A. Merlo**, L. Verderame, *Securing the “Bring Your Own Device” Paradigm*, IEEE Computer, (2014) 47(6):26-34. DOI: [10.1109/MC.2014.164](https://doi.org/10.1109/MC.2014.164).
- TDSC
2014 **A. Merlo**, M. Migliardi, N. Gobbo, F. Palmieri, A. Castiglione, *A Denial of Service Attack to UMTS Networks Using SIM-less Devices*, IEEE Transactions on Dependable and Secure Computing, (2014) 11(3):280-291, DOI: [10.1109/TDSC.2014.2315198](https://doi.org/10.1109/TDSC.2014.2315198).
Featured Article at IEEE CyberSecurity Initiative, 2015.
- IJCSE
2014 L. Caviglione, M. Coccoli, **A. Merlo**, *A Taxonomy-based Model of Security and Privacy in Online Social Networks*, International Journal of Computational Science and Engineering, (2014) 9(4):325-338, Inderscience, DOI: [10.1504/IJCSE.2014.060717](https://doi.org/10.1504/IJCSE.2014.060717).
- CS
2013 A. Armando, **A. Merlo**, M. Migliardi, L. Verderame, *Breaking and Fixing the Android Launching Flow*, Computer & Security, (2013) 39A:104-115, Elsevier, DOI: [10.1016/j.cose.2013.03.009](https://doi.org/10.1016/j.cose.2013.03.009).
- JHSN
2013 M. Migliardi, **A. Merlo**, *Improving Energy Efficiency in Distributed Intrusion Detection Systems*, Journal of High Speed Networks, (2013) 19(3):251-264, IoS Press, DOI: [10.3233/JHS-130476](https://doi.org/10.3233/JHS-130476).
- FGCS
2013 **A. Merlo**, *Secure Cooperative Access Control on Grid*, Future Generation Computer Systems, (2013) 29(2):497-508, Elsevier. DOI: [10.1016/j.future.2012.08.001](https://doi.org/10.1016/j.future.2012.08.001).
- JISIS
2012 A. Armando, G. Costa, **A. Merlo**, L. Verderame, *Securing the Bring Your Own Device Policy*, Journal of Internet Services and Information Security (2012), 2(3):3-16.
Best Paper Award at MIST 2012.
- JIAS
2012 L. Caviglione, **A. Merlo**, M. Migliardi, *Green-Aware Security: Towards a new Research Field*, Journal of Information Assurance and Security, (2012) 7(7):338-346, Dynamic Publishers Inc., USA.
- NS
2012 L. Caviglione, **A. Merlo**, *The Energy Impact of Security Mechanisms in Modern Mobile Devices*, Network Security, 2012(2):11-14, Elsevier. DOI : [10.1016/S1353-4858\(12\)70015-6](https://doi.org/10.1016/S1353-4858(12)70015-6).

- IGPL
2012 M. Aiello, **A. Merlo**, G. Papaleo, *Performance Assessment of DNS Tunneling Tools*, Logic Journal of the IGPL, (2012), Oxford Journals. DOI: [10.1093/jigpal/jzs029](https://doi.org/10.1093/jigpal/jzs029).
- JIAS
2011 **A. Merlo**, *A Cooperative Model for Resource Sharing on Grid*, Journal of Information Assurance and Security, (2011) 6(1):106-114, Dynamic Publishers Inc., USA.
- CCPE
2011 **A. Merlo**, A. Clematis, A. Corana, V. Gianuzzi, *Quality of Service on Grid: architectural and methodological issues*, in Concurrency and Computation: Practice and Experience, (2011) 23(8):745-766, Wiley, DOI: [10.1002/cpe.1641](https://doi.org/10.1002/cpe.1641).
- IJGUC
2009 V. Gianuzzi, D. D'Agostino, **A. Merlo**, A. Clematis, *Efficient management of resources and entities using the HyVonNe P2P architecture*, International Journal of Grid and Utility Computing, (2009) 1(3):216-226, DOI: [10.1504/IJGUC.2009.027649](https://doi.org/10.1504/IJGUC.2009.027649).

Book Chapters (7)

- SNE
2013b L. Caviglione, M. Coccoli, **A. Merlo**, *A Graph-based Approach to Model Privacy and Security Issues of Online Social Networks*, in Social Network Engineering for Secure Web Data and Services, pp. 184-205, IGI-Global. DOI: [10.4018/978-1-4666-3926-3.ch009](https://doi.org/10.4018/978-1-4666-3926-3.ch009).
- SNE
2013a L. Caviglione, M. Coccoli, **A. Merlo**, *On Social Network Engineering for Secure Web Data and Services*, in Social Network Engineering for Secure Web Data and Services', pp. 1-4, IGI-Global. DOI: [10.4018/978-1-4666-3926-3.ch001](https://doi.org/10.4018/978-1-4666-3926-3.ch001).
- HGI
2012 L. Caviglione, **A. Merlo**, *Analysis and Development of Green-Aware Security Mechanisms for Modern Internet Applications*, in Handbook of Green Information and Communication Systems, pp. 589-610, Wiley. DOI: [10.1016/B978-0-12-415844-3.00023-1](https://doi.org/10.1016/B978-0-12-415844-3.00023-1).
- RIE
2012 **A. Merlo**, A. Corana, V. Gianuzzi, A. Clematis, *SoRTSim: A high-level simulator for the evaluation of QoS models on Grid*, Remote Instrumentation for eScience and Related Aspects, Springer, pp. 161-176, Springer, ISBN 978-1-4614-0507-8, DOI: [10.1007/978-1-4614-0508-5_11](https://doi.org/10.1007/978-1-4614-0508-5_11).
- RIS
2011 **A. Merlo**, D. D'Agostino, V. Gianuzzi, A. Clematis, A. Corana, *GridWalker: a visual tool for supporting the advanced discovery of Grid resources*, in: Remote Instrumentation Services in the e-infrastructure, pp. 103-112, Springer, ISBN 978-1-4419-5573-9, , DOI: [10.1007/978-1-4419-5574-6_8](https://doi.org/10.1007/978-1-4419-5574-6_8).
- RIV
2010 **A. Merlo**, A. Clematis, A. Corana, D. D'Agostino, V. Gianuzzi, A. Quarati, *SoRTGrid: a Grid framework compliant with Soft Real Time requirements*, in Remote Instrumentation and Virtual Laboratories: Service Architecture and Networking, pp. 145-161, Springer, ISBN 978-1-4419-5595-1, DOI: [10.1007/978-1-4419-5597-5_13](https://doi.org/10.1007/978-1-4419-5597-5_13).

GER
2008 A. Clematis, A. Corana, D. D'Agostino, V. Gianuzzi, **A. Merlo**, *Grid services for 3D data analysis in Virtual Laboratories*, in *Grid Enabled Remote Instrumentation*, pp. 481-498, Springer, ISBN 978-0-387-09662-9, DOI: [10.1007/978-0-387-09663-6_32](https://doi.org/10.1007/978-0-387-09663-6_32).

International Conference Proceedings (42)

SECURITY
2017 S. Aonzo, G. Lagorio, **A. Merlo**, *RmPerm: a Tool for Android Permissions Removal*, in Proc. of the 14th International Conference on Security and Cryptography, July 24-26, Madrid, Spain.

CISIS
2017 M. Migliardi, S. Al-Haj Baddar, **A. Merlo**, *Reducing the Impact of Traffic Sanitization on Latency Sensitive Applications*, in Proc. of the 11th International Conference on Complex, Intelligent and Intensive Software Systems, July 10-12, Turin, Italy. DOI: [10.1007/978-3-319-61566-0_96](https://doi.org/10.1007/978-3-319-61566-0_96).

IFIP-SEC
2017 **A. Merlo**, G. C. Georgiu, *RiskInDroid: Machine Learning-based Risk Analysis on Android*, in Proc. of the 32nd International Conference on ICT Systems Security and Privacy Protection, Rome, Italy. DOI: [10.1007/978-3-319-58469-0_36](https://doi.org/10.1007/978-3-319-58469-0_36).

GPC
2017 **A. Merlo**, *BYODCert: Toward a Cross-Organizational BYOD paradigm*, in Proc. of the 12th International Conference on Green, Pervasive and Cloud Computing, Cetara, Italy. DOI: [10.1007/978-3-319-57186-7_52](https://doi.org/10.1007/978-3-319-57186-7_52).

GPC
2017 S. Al Haj Baddar, **A. Merlo**, M. Migliardi, F. Palmieri, *Dynamic Latency Sensitivity Recognition: an Application to Energy Saving*, in Proc. of the 12th International Conference on Green, Pervasive and Cloud Computing, Cetara, Italy. DOI: [10.1007/978-3-319-57186-7_12](https://doi.org/10.1007/978-3-319-57186-7_12).

HPCS
2016 **A. Merlo**, L. Lorrai, L. Verderame, *Efficient Trusted Host-based Card Emulation on TEE-enabled Android Devices*, in Proc. of the 11th International Conference on High Performance Computing Systems, pp. 454-459, Innsbruck, Austria. DOI: [10.1109/HPCSim.2016.7568370](https://doi.org/10.1109/HPCSim.2016.7568370).

AsiaCCS
2016 G. Costa, P. Gasti, **A. Merlo**, S.-H. Yu. *FLEX: A Flexible Code Authentication Framework for Delegating Mobile App Customization*, in Proc. of the 11th ACM Asia Conference on Computer and Communications Security, pp. 389-400, Xi'an, China. DOI: [10.1145/2897845.2897887](https://doi.org/10.1145/2897845.2897887).

ICMCIS
2016 A. Armando, G. Costa, **A. Merlo**, L. Verderame, K. Wrona, *Developing the NATO BYOD Security Policy*, in Proc. of the 15th International Conference on Military Communications and Information Systems, pp. 1-6, Brussels, Belgium. DOI: [10.1109/ICMCIS.2016.7496587](https://doi.org/10.1109/ICMCIS.2016.7496587).

AINA
2016 **A. Merlo**, M. Migliardi, E. Spadacini, *Balancing Delays and Energy Consumption in IPS-Enabled Networks*, in Proc. of the 30th IEEE International Conference on Advanced Information Networking and Applications, pp. 267-272, Crans-Montana, Switzerland. DOI: [10.1109/WAINA.2016.109](https://doi.org/10.1109/WAINA.2016.109)

- CCS MIST 2015b S. Al-Haj Baddar, **A. Merlo**, M. Migliardi, *SKETURE: A Sketch-based Packet Analysis tool*, in Proc. of the 7th ACM CCS International Workshop on Managing Insider Security Threats, pp. 67–70, Denver, USA. DOI: [10.1145/2808783.2808791](https://doi.org/10.1145/2808783.2808791).
- CCS MIST 2015a A. Armando, G. Bocci, G. Costa, R. Mammoliti, A. Merlo, S. Ranise, R. Traverso, A. Valenza, *Mobile App Security Assessment with the MAVeriC Dynamic Analysis Module*, in Proc. of the 7th ACM CCS International Workshop on Managing Insider Security Threats, pp. 41–49, Denver, USA. DOI: [10.1145/2808783.2808786](https://doi.org/10.1145/2808783.2808786).
- 3PGCIC 2015 M. Migliardi, **A. Merlo**, A. Passaglia, *On the Feasibility of Moderating a Peer-to-Peer CDN System: A Proof-of-Concept Implementation* in Proc. of the 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing, Krakow, Poland. DOI : [10.1109/3PGCIC.2015.53](https://doi.org/10.1109/3PGCIC.2015.53).
- CSF 2015 A. Armando, R. Carbone, G. Costa, **A. Merlo**, *Android Permissions Unleashed*, in Proc. of the 28th IEEE Computer Security Foundations Symposium, IEEE. DOI: [10.1109/CSF.2015.29](https://doi.org/10.1109/CSF.2015.29).
- ETAPS 2015 A. Armando, G. Bocci, G. Chiarelli, G. Costa, G. De Maglie, R. Mammoliti, and **A. Merlo**, *SAM: the Static Analysis Module of the MAVERIC Mobile App Security Verification Platform*, in Proc. of 2015 European Joint Conferences on Theory and Practice of Software, LNCS Vol. 9035, 2015, pp 225-230, Springer, DOI: [10.1007/978-3-662-46681-0_19](https://doi.org/10.1007/978-3-662-46681-0_19).
- HPCS 2015b A. Armando, **A. Merlo**, L. Verderame, *Trusted Host-Based Card Emulation*, in Proc. of the 10th International Conference on High Performance Computing Systems, IEEE. DOI: [10.1109/HPCSim.2015.7237043](https://doi.org/10.1109/HPCSim.2015.7237043).
- HPCS 2015a M. Guerar, M. Migliardi, **A. Merlo**, M. Benmohammed, B. Messabih, *A Completely Automatic Public Physical test to tell Computers and Humans Apart: a way to enhance authentication schemes in mobile devices*, in Proc. of the 10th International Conference on High Performance Computing Systems, IEEE. DOI: [10.1109/HPCSim.2015.7237041](https://doi.org/10.1109/HPCSim.2015.7237041).
- WiSec 2014 A. Armando, G. Costa, **A. Merlo**, L. Verderame, *Enabling BYOD through Secure Meta-Market*, in Proc. of the 7th ACM Conference on Security and Privacy in Wireless and Mobile Networks, pp. 219-230, ACM NY, DOI: [10.1145/2627393.2627410](https://doi.org/10.1145/2627393.2627410).
- HPCS 2014 **A. Merlo**, M. Migliardi, P. Fontanelli, *On Energy-Based Profiling of Malware in Android*, in Proc. of the 9th International Conference on High Performance Computing Systems, pp. 535-542, IEEE, DOI: [10.1109/HPCSim.2014.6903732](https://doi.org/10.1109/HPCSim.2014.6903732).
- CISIS 2014 **A. Merlo**, M. Migliardi, D. Raso, E. Spadacini, *Optimizing Network Energy Consumption through Intrusion Prevention Systems*, in Proc. of the 7th International Conference on Computational Intelligence in Security for Information Systems, AISC, Vol. 299, 2014, pp. 505-515, Springer, DOI: [10.1007/978-3-319-07995-0_50](https://doi.org/10.1007/978-3-319-07995-0_50).

- IMIS
2014 M. Migliardi, **A. Merlo**, L. Cavaglione, *A Survey of Green, Energy-Aware Security and Some of Its Recent Developments in Networking and Mobile Computing*, in Proc. of the 8th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, pp. 241-246, IEEE, DOI: [10.1109/IMIS.2014.30](https://doi.org/10.1109/IMIS.2014.30).
- INCoS
2014 M. Migliardi, **A. Merlo**, M. Tettamanti, *Reducing Energy Consumption in Prospective Memory Support System through Hierarchical Positioning Algorithm*, in Proc. of 6th International Conference on Intelligent Networking and Collaborative Systems, pp. 575-580, IEEE, DOI: [10.1109/INCoS.2014.47](https://doi.org/10.1109/INCoS.2014.47).
- AINA
2013 M. Migliardi, **A. Merlo**, *Energy Consumption Simulation of Different Distributed Intrusion Detection Approaches*, in Proc. of 27th IEEE International Conference on Advanced Information Networking and Applications, pp. 1547-1552, IEEE, DOI: [10.1109/WAINA.2013.214](https://doi.org/10.1109/WAINA.2013.214).
Best Paper Award.
- SAC
2013 A. Armando, G. Costa, **A. Merlo**, L. Verderame, *Bring Your Own Device, Securely*, in Proc. of the 28th ACM Symposium on Applied Computing, Vol. 2, pp. 1852-1858, ACM, DOI: [10.1145/2480362.2480707](https://doi.org/10.1145/2480362.2480707).
- IFIP-SEC
2013 A. Armando, **A. Merlo**, L. Verderame, *An Empirical Evaluation of the Android Security Framework*, in Proc. of the 28th International Conference on ICT Systems Security and Privacy Protection, LNCS, Vol. 405, pp. 176-189, Springer, DOI: [10.1007/978-3-642-39218-4_14](https://doi.org/10.1007/978-3-642-39218-4_14).
- ARES
2013 N. Gobbo, **A. Merlo**, M. Migliardi, *A Denial of Service attack to GSM networks via attach procedure*, in Proc. of the 8th International Conference on Availability, Reliability and Security, LNCS, Vol. 8128, pp. 361-376, Springer, DOI: [10.1007/978-3-642-40588-4_25](https://doi.org/10.1007/978-3-642-40588-4_25).
- HPCS
2013 M. Curti, **A. Merlo**, M. Migliardi, S. Schiappacasse, *Towards Energy-Aware Intrusion Detection Systems on Mobile Devices*, in Proc. of the 8th International Conference on High Performance Computing Systems, pp. 289-296, IEEE, DOI: [10.1109/HPCSim.2013.6641428](https://doi.org/10.1109/HPCSim.2013.6641428).
- EurAsia
2013 A. Armando, A. Castiglione, G. Costa, U. Fiore, **A. Merlo**, L. Verderame, I. You, *Trustworthy Opportunistic Access to the Internet of Services*, in Proc. of the 1st Information and Communication Technology Eurasia Conference, LNCS, Vol. 7804, 2013, pp. 469-478, Springer, DOI: [10.1007/978-3-642-36818-9_52](https://doi.org/10.1007/978-3-642-36818-9_52).
- IFIP-SEC
2012 A. Armando, **A. Merlo**, A. Migliardi, L. Verderame, *Would you mind forking this process? A Denial-of-Service attack on Android (and some countermeasures)*, in Proc. of the 27th International Conference on ICT Systems Security and Privacy Protection, LNCS IFIP AICT n.376, pp. 13-24, Springer, DOI: [10.1007/978-3-642-30436-1_2](https://doi.org/10.1007/978-3-642-30436-1_2).
Best Paper Award.
- TGC
2012 A. Armando, G. Costa, **A. Merlo**, *Formal Modeling and Reasoning about the Android Security Framework*, in Proc. of the 7th International Symposium on Trustworthy Global Computing, LNCS Vol. 8191, 2013, pp 64-81, Springer. DOI: [10.1007/978-3-642-41157-1_5](https://doi.org/10.1007/978-3-642-41157-1_5).

- TAP
2012 A. Armando, G. Pellegrino, R. Carbone, **A. Merlo**, D. Balzarotti, *From Model-checking to Automated Testing of Security Protocols: Bridging the Gap*, in Proc. of the 6th International Conference on Tests & Proofs LNCS Vol. 7305, 2012, pp 3-18, Springer, DOI: [10.1007/978-3-642-30473-6_3](https://doi.org/10.1007/978-3-642-30473-6_3).
- SGSec
2012 A. Armando, R. Carbone, **A. Merlo**, *Formal Analysis of a Privacy-Preserving Billing Protocol*, in Proc. of the 1st Workshop on Smart Grid Security, LNCS 7823, 2013, pp. 108-119, Springer, DOI: [10.1007/978-3-642-38030-3_8](https://doi.org/10.1007/978-3-642-38030-3_8).
- ECL-IT
2012 P. Maresca, **A. Merlo**, M. Arrigoni Neri, L. Stanganelli, *Using ETC framework in virtual laboratories for online students* in Proc. of the 7th Workshop of the Italian Eclipse Community.
- IAS
2011 L. Caviglione, **A. Merlo**, M. Migliardi, *What is Green Security?*, in Proc. of the 7th International Conference on Information Assurance and Security, Malacca (Malaysia), pp. 366-371, IEEE. DOI: [10.1109/ISIAS.2011.6122781](https://doi.org/10.1109/ISIAS.2011.6122781).
- PST
2011 P. Gasti, **A. Merlo**, *On Re-Use of Randomness in Broadcast Encryption*, in Proc. of the 9th IEEE International Conference on Privacy, Security and Trust, Canada, pp. 36-43, IEEE, DOI: [10.1109/PST.2011.5971961](https://doi.org/10.1109/PST.2011.5971961).
- CISIS
2011 **A. Merlo**, G. Papaleo, S. Veneziano, M. Aiello, *A Comparative Performance Evaluation of DNS Tunneling Tools*, in Proc. of the 4th International Conference on Computational intelligence in Security for Information Systems, LNCS Vol. 6694, 2011, pp. 84-91, Springer, DOI: [10.1007/978-3-642-21323-6_11](https://doi.org/10.1007/978-3-642-21323-6_11).
- MiPRO
2011 M. Migliardi, **A. Merlo**, *Modeling the energy consumption of a distributed IDS: a step towards Green Security*, in Proc. of the 34th IEEE International Convention on Information and Communication Technology, Electronics and Microelectronics, pp. 1452 - 1457, IEEE.
- NCA
2010 P. Gasti, **A. Merlo**, G. Ciaccio, G. Chiola, *On the Integrity of Network Coding-based Anonymous P2P File Sharing Networks*, in Proc. of the 9th IEEE International Symposium on Network Computing and Applications, pp.192-197, IEEE, DOI: [10.1109/NCA.2010.34](https://doi.org/10.1109/NCA.2010.34).
- IAS
2010 **A. Merlo**, A. Armando, *Cooperative Access Control for the Grid*, in Proc. of the 6th International Conference on Information Assurance and Security, pp. 228-233, IEEE, DOI: [10.1109/ISIAS.2010.5604068](https://doi.org/10.1109/ISIAS.2010.5604068).
- M-MPAC
2010 V. Gianuzzi, **A. Merlo**, *Beaconing support in Publish-Subscribe Middleware for Vehicular Applications*, in Proc. of the 2nd International Workshop on Pervasive Mobile and Embedded Computing, pp. 1-8, ACM, DOI: [10.1145/1890791.1890795](https://doi.org/10.1145/1890791.1890795).
- CISIS
2008b V. Gianuzzi, **A. Merlo**, A. Clematis, D. D'Agostino, *Managing Networks of Mobile Entities using the HyVonNe P2P Architecture*, in Proc. of the 2nd International Conference on Complex, Intelligent and Software Intensive Systems, pp. 335-341, IEEE, DOI: [10.1109/CISIS.2008.62](https://doi.org/10.1109/CISIS.2008.62).

CISIS
2008a A. Clematis, A. Corana, D. D'Agostino, V. Gianuzzi, **A. Merlo**, A. Quarati, *A Distributed Approach for Structured Resource Discovery on Grid*, in Proc. of the 2nd International Conference on Complex, Intelligent and Software Intensive Systems, pp. 117-125. IEEE, DOI: [10.1109/CISIS.2008.112](https://doi.org/10.1109/CISIS.2008.112).

GADA
2006 A. Clematis, A. Corana, D. D'Agostino, V. Gianuzzi, **A. Merlo**, *Resource selection and application execution in a Grid: A migration experience from GT2 to GT4*, in Proc. of the International Conference on Grid computing, high-performance and Distributed Applications, LNCS, n. 4276, pp. 1132-1142, Springer, DOI: [10.1007/11914952_4](https://doi.org/10.1007/11914952_4).

Technical Reports (2)

IEIIT
2010b **A. Merlo**, G Papaleo, M. Aiello, C. Martini, *A taxonomy of WLAN attacks and countermeasures*, Tech. Rep. CNR-IEIIT/GE No. 1/2010, Jan. 2010.

IEIIT
2010a **A. Merlo**, A. Corana, *Analysis of multi-dimensional data on parallel and distributed computing systems*, Tech. Rep. CNR-IEIIT/GE No. 2/2010, Jan. 2010.

Ph.D. Thesis

DISI
2010 **A. Merlo**. *An architectural approach to the management of applications with QoS requirements on Grid*. Available at <http://www.disi.unige.it/dottorato/THESES/2010-06-MerloA.pdf>.

Newspaper articles (3)

MD
2013 M. Migliardi, **A. Merlo**, *Mobile Devices: new security problems*, in Mondo Digitale, No. 48, Dec. 2013.

ERCIM
2013 G. Costa, **A. Merlo**, L. Verderame, *Market-based Security for Mobile Devices*, in Ercim News, No. 93, pp. 32-33, Apr. 2013.

MD
2012 L. Caviglione, **A. Merlo**, M. Migliardi, *Green Security: Energy Saving and Security*, in Mondo Digitale, No. 44, Dec. 2012.

Honors & Awards

Best Paper Awards (3)

- Mar. 2013 BEST PAPER AWARD at AINA 2013 for the paper *Energy Consumption Simulation of Different Distributed Intrusion Detection Approaches* [[AINA 2013](#)].
- Nov. 2012 BEST PAPER AWARD at MIST 2012 for the paper *Securing the Bring Your Own Device Policy* [[JISIS 2012](#)].
- Jun. 2012 BEST PAPER AWARD at SEC 2012 for the paper: *Would you mind forking this process? A Denial of Service Attack on Android (and some countermeasures)* [[IFIP-SEC 2012](#)].
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Featured Articles (2)

- Apr. 2014 The paper *A Denial of Service to UMTS networks* has been selected as Featured Article at the [IEEE Cyber Security Initiative](#).
- Feb. 2015 The paper *A Denial of Service to UMTS networks* has been recommended in the Spotlight on Transactions 2015 in the paper *Denial-of-Service Attacks to UMTS*, IEEE Computer, Vol. 48, N. 2, p. 6, 2015, DOI: [0.1109/MC.2015.42](#).
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Technological Transfer Awards (4)

- Nov. 2015 [Talent Gardner 2015](#) Award for the [Approver](#) Tool.
- Nov. 2015 Best Pitch Award at [Smart Cup Liguria 2015](#) for the [Approver](#) Tool.
- Dec. 2014 Finalist at [EIT ICT Labs Idea Challenge for CyberSecurity and Privacy 2014](#), with the [BYODroid](#) project.
- Jun. 2014 Winner of the [StartCup 2013](#) for the [BYODroid](#) project.
-

University Awards (6)

- Jun. 2006 Special Mention Award from [AICA-FEDERCOMIN](#) for my M.Sc. thesis, recognized as one of the 16 best Italian M.Sc. theses on ICT in 2005.
- Sept. 2005 Diploma with merit at [Istituto Superiore di Studi in Tecnologie della Comunicazione e dell'Informazione \(ISICT\)](#).

- Sept. 2004 Scholarship from Istituto Superiore di Studi in Tecnologie della Comunicazione e dell'Informazione (ISICT) for a.y. 2004/05.
- Sept. 2003 Scholarship from Istituto Superiore di Studi in Tecnologie della Comunicazione e dell'Informazione (ISICT) for a.y. 2003/04.
- Jun. 2002 Scholarship for academic merits from [Fondazione Pretto-Cassanello](#) for a.y. 2001/02.
- Jun. 2001 Scholarship for academic merits from [Fondazione Pretto-Cassanello](#) for a.y. 2000/01.
-

Service to the profession

Editorial Activity (5)

- 2016 - Lead Guest Editor of the Special Issue on *Advances in High Performance Computing and Simulations*, to be hosted at *Concurrency and Computation: Practice and Experience*, Wiley.
- 2015 - 2017 Lead Editor of the book *Adaptive Mobile Computing: Advances in Processing of Mobile Data Sets*, Elsevier.
- 2015 - 2016 Member of the Editorial Advisory Board of the book *Security Solutions and Applied Cryptography in Smart Grid Communications*, IGI-Global.
- Jan. 2014 - Associate Editor, *Journal of High Speed Networks*, IOS Press.
- 2012 - 2013 Editor of the book *Social Network Engineering for Secure Web Data and Services*. DOI: 10.4018/978-1-4666-3926-3.
-

General Chair (1)

- [HPCS 2017](#) 15th International Conference on High Performance Computing & Simulation, July 17-21, 2017, Genoa. <http://hpcs2017.cisedu.info>
-

Local Chair (1)

- [AIXIA 2016](#) 15th International Conference of the Italian Association for Artificial Intelligence, Nov. 21-25, 2016.
-

Workshop Chair (7)

- SPCLOUD 2017 7th International Workshop on Security and Performance in Cloud Computing, July 17-21, 2017, Genoa, Italy.
- SHPCS 2017 13th International Workshop on Security and High Performance Computing, July 17-21, 2016, Genoa, Italy.
- SPCLOUD 2016 6th International Workshop on Security and Performance in Cloud Computing, July 18-22, 2016, Innsbruck, Austria.
- SHPCS 2016 12th International Workshop on Security and High Performance Computing, July 18-22, 2016, Innsbruck, Austria.
- SPCLOUD 2015 5th International Workshop on Security and Performance in Cloud Computing, July 20-24, 2015, Amsterdam, the Netherlands.
- SHPCS 2015 11th International Workshop on Security and High Performance Computing, July 20-24, 2015, Amsterdam, the Netherlands.
- SPCLOUD 2014 4th International Workshop on Security and Performance in Cloud Computing, July, 21-25, Bologna, Italy.
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Track Chair (4)

- ITA-SEC 2016 Track: Demos. 1st Italian Conference on Cyber Security.
- IMIS 2015 Track: Smart Spaces and Intelligent Environments, 9th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing.
- IMIS 2014 Track Security, Trust and Privacy, 8th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing.
- INCoS 2014 Track Mobile Collaborative Systems, 6th International Conference on Intelligent Networking and Collaborative Systems, Sep. 10-12, 2014, Salerno, Italy.
-

Session Chair (10)

- [HPCS 2016](#) Session: SHPCS I, 31st International Conference on High Performance Computing & Simulation, July 18-22, 2016, Innsbruck, Austria.
- [HPCS 2016](#) Session: SHPCS II, 31st International Conference on High Performance Computing & Simulation, July 18-22, 2016, Innsbruck, Austria.
- [HPCS 2016](#) Session: Tutorial V, 31st International Conference on High Performance Computing & Simulation, July 18-22, 2016, Innsbruck, Austria.
- [AsiaCCS 2016](#) Session: Mobile Security II, 11th ACM Asia Conference on Computer and Communications Security, May 30 - June 3, 2016, Xi'an, China.
- [HPCS 2015](#) Session: SHPCS I, 30th International Conference on High Performance Computing & Simulation, July 20-24, 2015, Amsterdam, the Netherlands.
- [HPCS 2014](#) Session: SHPCS II, 29th International Conference on High Performance Computing & Simulation, July, 21-25, Bologna, Italy.
- [CISIS \(Sec\) 2014](#) Session Infrastructure and Network Security II, 7th International Conference on Computational Intelligence in Security for Information Systems, June 25-27, 2014, Bilbao, Spain.
- [CISIS 2014](#) Session: Parallel Computing, 8th International Conference on Complex, Intelligent and Software Intensive Systems, July 2-4, 2014, Birmingham, UK.
- [HPCS 2013](#) Session High Performance Mobile Systems, Location-Based Services, and Applications in Ubiquitous Computing, 29th International Conference on High Performance Computing & Simulation, July 1-5, 2013, Helsinki, Finland.
- [AINA 2013](#) Session: Job Scheduling and Environment Sensing, 27th IEEE International Conference on Advanced Information Networking and Applications, March 25-28, 2013, Barcelona, Spain.

Journal Reviewer (11)

- 2016 - [ACM Transactions on Cyber-Physical Systems](#), ACM.
- 2016 - [The Journal of Supercomputing](#), ISSN: 0920-8542, Springer.
- 2015 - [Pervasive and Mobile Computing](#), ISSN: 0045-7906, Elsevier.
- 2015 - [Computers & Electrical Engineering](#), ISSN: 0045-7906, Elsevier.

- 2015 - [Telematics and Informatics](#), ISSN: 0736-5853, Elsevier.
- 2014 - [Journal of Systems and Software](#), ISSN: 0164-1212, Elsevier.
- 2013 - [Journal of High Speed Networks](#), ISSN: 0926-6801, IoS Press.
- 2012 - [Computers & Security](#), ISSN: 0167-4048, Elsevier.
- 2011 - [Future Generation Computer Systems](#), ISSN: 0167-739X, Elsevier.
- 2011 - [Journal of Network and Computer Applications](#), ISSN: 1084-8045, Elsevier.
- 2010 - [Concurrency and Computation, Practice and Experience](#), ISSN: 1532-0634, Elsevier.

TPC Membership (44)

- [GPC 2018](#) 13th International Conference on Green, Pervasive and Cloud Computing, Mar. 11-13, 2018, Hangzhou, China.
- [IAS 2018](#) 14th IEEE International Conference on Information Assurance and Security, Dec. 13-15, 2018, Porto, Portugal.
- [SHPCS 2018](#) 13th International Workshop on Security and High Performance Computing, July, 16-20, 2018, Orleans, France.
- [SAC 2018](#) 33rd ACM SIGAPP Symposium On Applied Computing, Apr. 9-13, 2018, Pau, France.
- [EASyCoSe 2017](#) 4th International Workshop on Energy-Aware Systems, Communications and Security, Jul. 10-12, 2017, Turin, Italy.
- [MSPN 2017](#) 3rd International Conference on Mobile, Secure and Programmable Networking, June 29-30, 2017, Paris, France.
- [EUSPN 2017](#) 8th International Conference on Emerging Ubiquitous Systems and Pervasive Networks, Sep. 18-20, 2017, Lund, Sweden.
- [AINA 2017](#) 31st IEEE International Conference on Advanced Information Networking and Applications, Mar. 27-29, Taipei, Taiwan.
- [GPC 2017](#) 12th International Conference on Green, Pervasive and Cloud Computing, May 11-14, Cetara, Italy.

- [HPCS 2017](#) 32nd International Conference on High Performance Computing & Simulation, July 17-21, 2017, Genoa, Italy.
- [SPCLOUD 2017](#) 7th International Workshop on Security and Performance in Cloud Computing, July 17-21, 2017, Genoa, Italy.
- [SHPCS 2017](#) 13th International Workshop on Security and High Performance Computing, July 17-21, 2017, Genoa, Italy.
- [SAC 2017](#) 32nd ACM SIGAPP Symposium On Applied Computing, Apr. 3-7, 2017, Marrakech, Morocco.
- [ACM CCS MIST 2016](#) 8th ACM CCS International Workshop on Managing Insider Security Threats, In Conjunction with ACM CCS 2016, Oct. 24-28, 2016, Vienna, Austria.
- [WISTP 2016](#) 10th International Conference on Information Security Theory and Practice, Sep. 26-27, 2016, Heraklion, Crete, Greece.
- [MobiSec 2016](#) 2016 International Symposium on Mobile Internet Security, Jul. 14-15, 2016, Taichung, Taiwan.
- [MSPN 2016](#) 2nd International Conference on Mobile, Secure and Programmable Networking, June 1-3, 2016, Paris, France.
- [EASyCoSe 2016](#) 3rd International Workshop on Energy-Aware Systems, Communications and Security, March 23-25, 2016, Crans-Montana, Switzerland.
- [HPCS 2016](#) 31st International Conference on High Performance Computing & Simulation, July 18-22, 2016, Innsbruck, Austria.
- [SPCLOUD 2016](#) 6th International Workshop on Security and Performance in Cloud Computing, July 18-22, 2016, Innsbruck, Austria.
- [SHPCS 2016](#) 12th International Workshop on Security and High Performance Computing, July 18-22, 2016, Innsbruck, Austria.
- [WISTP 2015](#) 9th International Conference on Information Security Theory and Practice, Aug. 24-25, 2015, Heraklion, Crete, Greece.
- [HPCS 2015](#) 30th International Conference on High Performance Computing & Simulation, July 20-24, 2015, Amsterdam, the Netherlands.
- [MSPN 2015](#) 1st International Conference on Mobile, Secure and Programmable Networking, June 15-17, 2015, Paris, France.

- SPCloud
2015 5th Int. Workshop on Security, Privacy and Performance in Cloud Computing July 20-24, 2015, Amsterdam, the Netherlands.
- SHPCS
2015 10th International Workshop on Security and High Performance Computing Systems, July 20-24, 2015, Amsterdam, the Netherlands.
- INCOS
2015 7th International Conference on Intelligent Networking and Collaborative Systems, Sep. 2-4, 2015, Taipei, Taiwan.
- SPCloud
2014 4th International Workshop on Security, Privacy and Performance in Cloud Computing, July, 21-25, Bologna, Italy.
- HPCS
2014 29th International Conference on High Performance Computing & Simulation, July, 21-25, Bologna, Italy.
- NBiS
2014 17th International Conference on Network-based Information Systems, Sept. 10-12, 2014, Salerno, Italy.
- INCoS
2014 6th International Conference on Intelligent Networking and Collaborative Systems, Sept. 10-12, 2014, Salerno, Italy.
- EASyCoSe
2016 2nd International Workshop on Energy-Aware Systems, Communications and Security, Sept. 10-12, 2014, Salerno, Italy.
- IMIS
2014 8th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, July 2-4, 2014, Birmingham, UK.
- CISIS
2014 8th International Conference on Complex, Intelligent, and Software Intensive Systems, July 2-4, 2014, Birmingham, UK.
- SHPCS
2014 9th International Workshop on Security and High Performance Computing Systems, July 25-29, 2014, Bologna, Italy.
- IAS
2014 10th IEEE International Conference on Information Assurance and Security, November 27-29, 2014, Okinawa, Japan.
- NBiS
2013 16th International Conference on Network-based Information Systems, Sept. 4-6, 2013, Gwangju, China.
- IFIP-SEC
2013 28th IFIP International Information Security and Privacy Conference, July 8-10, 2013, Auckland, New Zealand.
- IAS
2013 9th IEEE International Conference on Information Assurance and Security, December 4-6, 2013, Yasmine Hammamet, Tunisia.

- SHPCS 2013** 8th International Workshop on Security and High Performance Computing Systems, July 1-5, 2013, Helsinki, Finland.
- EASyCoSe 2013** 1st International Workshop on Energy-Aware Systems, Communications and Security, March 25-28, 2013, Barcelona, Spain.
- IAS 2012** 8th IEEE International Conference on Information Assurance and Security, November 21-23, 2012, Sao Carlos, Brazil.
- SHPCS 2012** 7th International Workshop on Security and High Performance Computing Systems, July 2-6, 2012, Madrid, Spain.
- IAS 2011** 7th IEEE International Conference on Information Assurance and Security, December 5-8, 2011, Malacca, Malaysia.

Member of Research Commissions (1)

- Mar. 2016 - Member of the Research Commission at DIBRIS, University of Genoa, for the research program [Security and Safety of Critical Systems](#).

Member of Selection Boards (8)

- Mar. 2016 Member of the selection board for thesis defenses at [2nd level postgraduate Master in Cyber Security and Data Protection](#) (I cycle), University of Genoa.
- Feb. 2016 Member of the commission for the selection of alumni for the [2nd level postgraduate Master in Cyber Security and Data Protection](#) (II cycle), University of Genoa.
- Jan. 2016 Member of the selection board for the research grant N. 44, D.R. n. 9828, 16.11.2015, University of Genoa.
- Jan. 2016 Member of the selection board for the research grant, N. 45, D.R. n. 9828, 16.11.2015, University of Genoa.
- Nov. 2015 Member of the selection board for the [CLUSIT prize 2015](#), a prize for innovation in Cyber Security.
- Sep. 2015 President of the selection board for the admission at [Istituto Superiore di Studi in Tecnologie della Comunicazione e dell'Informazione \(ISICT\)](#), a.y. 2015/16.
- Apr. 2014 Member and secretary of the selection board for the public selection for a fixed-term Assistant Professor position, RTD-A, s.s.c. ING-INF/05, at E-Campus University, D.P.C.T.O.

Feb. 12, 2014, n. 67/14.

May 2012 Member of the selection board for the research grant, N. 34, D.R. n. 367, 23.3.2012, University of Genoa.

Member of Management Committees (2)

Mar. 2016 Member of the management committee for Database courses at [Telecommunication School for Italian Armed Forces](#), Chiavari, Italy.

Oct. 2015 - Member of the management committee at [2nd level postgraduate Master in Cyber Security and Data Protection](#), University of Genoa.

Event Organization (3)

Oct. 2016 Organizer and chair of the [2016 CSecLab Workshop on Security Analysis](#), DIBRIS, University of Genoa.

Mar. 2016 Organizer and chair of the [2015 CSecLab Workshop on Security of Mobile Applications](#), DIBRIS, University of Genoa.

Oct. 2014 Organizer of the [2014 CSecLab Workshop on Mobile Security](#), DIBRIS, University of Genoa.

Conference attendance (24)

[SEC 2017](#) 32nd IFIP TC 11 International Information Security and Privacy Conference, May 29-31, 2017, Rome, Italy.

[GPC 2017](#) 12th International Conference on Green, Pervasive and Cloud Computing, May 11-14, Cetara, Italy.

[HPCS 2016](#) 31th International Conference on High Performance Computing & Simulation, Jul. 18-22, 2016, Innsbruck, Austria.

[AsiaCCS 2016](#) 11th ACM Asia Conference on Computer and Communications Security, May 30 - Jun. 3, 2016 Xi'an, China.

[AINA 2016](#)

- 30th IEEE International Conference on Advanced Information Networking and Applications, Mar. 23-25, 2016, Crans-Montana, Switzerland.
- 3GPCIC
2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing, Nov. 4-6, 2015, Krakow, Poland.
- CCS
2015 22nd ACM Conference on Computer and Communications Security, Oct. 12-16, 2015, Denver, Colorado, USA.
- IMIS
2015 9th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, Jul. 8-10, 2015, Blumenau, Brazil.
- HPCS
2015 30th International Conference on High Performance Computing & Simulation, Jul. 20-24, 2015, Amsterdam, the Netherlands.
- WiSec
2014 7th ACM Conference on Security and Privacy in Wireless and Mobile Networks, Jul. 23-25, 2014, Oxford, UK.
- HPCS
2014 9th International Conference on High Performance Computing Systems, Jul. 21-25, 2014, Bologna, Italy.
- IMIS
2014 8th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing, Jul. 2-4, 2014, Birmingham, UK.
- INCoS
2014 6th International Conference on Intelligent Networking and Collaborative Systems, Sep. 10-12, 2014, Salerno, Italy.
- CISIS
2014 8th International Conference on Complex, Intelligent and Software Intensive Systems, Jul. 2-4, 2014, Birmingham, UK.
- CISIS-Sec
2014 7th International Conference on Computational Intelligence in Security for Information Systems, Jun. 25-27, 2014, Bilbao, Spain.
- HPCS
2013 8th International Conference on High Performance Computing Systems, Jul. 1-5, Helsinki, Finland.
- AINA
2013 27th IEEE International Conference on Advanced Information Networking and Applications, Mar. 25-28, 2013, Barcelona, Spain.
- SAC 2013 28th ACM Symposium on Applied Computing, Mar. 18-22, 2013, Coimbra, Portugal.
- SEC
2012 27th IFIP TC 11 International Information Security and Privacy Conference, Jun. 3-6, 2012, Heraklion, Crete, Greece.
- IAS
2011

- 7th International Conference on Information Assurance and Security, Dec. 4-8, Malacca, Malaysia.
- IAS
2010 6th International Conference on Information Assurance and Security, Aug. 23-25, 2010, Atlanta (GA), USA.
- INGRID
2010 5th International Workshop on Distributed Collaborative Laboratories: Instrumenting the Grid, May 12-14, 2010, Poznan, Poland.
- INGRID
2009 4th International Workshop on Distributed Collaborative Laboratories: Instrumenting the Grid, Apr. 1-3, 2009, Alghero, Italy.
- INGRID
2008 3rd International Workshop on Distributed Collaborative Laboratories: Instrumenting the Grid, Apr. 9-11, 2008, Ischia, Italy.
- GADA
2006 1st International Conference on Grid computing, high-performance and Distributed Applications, Oct. 29 - Nov. 3, 2006, Montpellier, France.
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Grants (8)

- Nov. 2014 - Oct. 2016 BYODCert Project, funded by the University of Genoa. Total funding: € 16.000. Principal Investigator.
- Aug. 2014 - Jul. 2016 EduOpen Project, funded by the Italian Ministry of Education, University and Research (MIUR). Faculty participant. <http://en.eduopen.org/>
- Jan. 2014 - Dec. 2016 Smart Intelligent and Eco-friendly Mobility (MIE) Project, funded by the Italian Ministry of Education, University and Research (MIUR). Total funding: € 7.782.800. Faculty participant. http://www.s3lab.polito.it/progetti/progetti_in_corso/mie
- Mar. 2013 - Feb. 2016 PLUG-IN Project, funded by the Italian Ministry of Education, University and Research (MIUR). Total funding: € 3.408.950. Faculty participant. <http://www.siitscpa.it/index.php/progetti/2011-09-24-14-26-55/plug-in>.
- Oct. 2012 - Sep. 2015 Security Horizons (PRIN Project no. 2010XSEMLC), funded by the Italian Ministry of Education, University and Research (MIUR). Total funding: € 572.157. Faculty participant. <http://people.unica.it/bart/2012/10/24/security-horizons/>.
- Nov. 2011 - Mar. 2013 Security and Cloud Computing Project, POR Liguria, funded by Liguria Region. Total funding: € 150.000. Faculty participant. https://sites.google.com/a/manydesigns.com/cloud_security/.

- Nov. 2010 SPaCloS Project, Project no. 257876, FP7-ICT-2009-5, ICT-2009.1.4: Trustworthy ICT,
- Mar. 2014 funded by EC. Total funding: € 3.610.000. Faculty participant. <http://www.spacios.eu>.
- Mar. 2010 SINTESIS Project, funded by the Italian Ministry of Education, University and Research
- Feb. 2012 (MIUR). Total funding: € 3.600.00. Faculty participant. <http://www.siitscpa.it/index.php/progetti/2011-09-24-14-26-54/sintesis>.

Technological Transfer

- Talos **Co-founder** and **Chief Technology Officer** of the startup Talos s.r.l.s. (<http://www.talos-security.com>), founded on 20th Jan. 2016 in Savona (Italy) and currently hosted by the University of Genoa. Talos has implemented and sells Approver, a tool performing a complete security analysis of mobile applications. The technology as well as the methodologies at the basis of Approver are the result of the research described in [IJIS 2015], [TGC 2012], [ETAPS 2015] and [CCS MIST 2015a].
- MAVeriC The research results presented in [TGC 2012], [JoWUA 2014b], [ETAPS 2015] and [CCS MIST 2015a] have been applied in the tool MAVeriC, currently adopted by Poste Italiane S.p.A. to perform security assessment of Android apps.
- BYODroid The research results presented in [TGC 2012], [JISIS 2012], [ACM SAC 2013], [ACM WiSec 2014], [Computer 2014] and [IJIS 2015], have been applied in the tool BYODroid that supports the enforcement of BYOD security policy on Android devices. BYODroid is currently adopted at [Nato NCI Agency Cyber Security Innovation](#), L'Aia, Netherlands, as discussed in [ICMCIS 2016].

Tools for Research (14)

- TEA The Trusted host-based card Emulation for Android (TEA) [HPCS 2016] is a secure implementation of the THCE paradigm described in [HPCS 2015b].
- BYODCert BYODCert is a cloud-based solution for the certification of mobile devices in BYOD scenarios, developed in the project [BYODCert].
- BrightPass BrightPass is a user authentication system for Android that has been developed in cooperation with the University of Science and Technology of Oran Mohamed Boudiaf (Algeria), the University of Constantine (Algeria), the University of Padua, and the University of Salerno. More information on BrightPass can be found in [TDSC 2016].
- FLEX FLEX is a framework for authenticating mobile code. It has been developed in cooperation with the New York Institute of Technology. More information can be found in [AsiaCCS

2016]. FLEX source code is available at <http://cl.ly/1L3n2P1i2F2d>.

- SKETURE SKETURE is a tool for the analysis of network packets that generates statistical reports on the behavior of network nodes, but granting the user's privacy. The tool is described in [CCS MIST 2015b] and [JHSN 2016], and it has been developed in cooperation with the University of Jordan.
- SCP The Safe Content Provider is an Android component for runtime management of SCPIntents. More information can be found in [CSF 2015]. The source code of SCP is available at <https://github.com/SCPTeam/Safe-Component-Provider>.
- MLM The *Middle-Level Measurements* (MLM) is a kernel module allowing to evaluate the energy consumption of both WI-FI and CPU in Android, by interpolating energy consumption data coming from different energy sinks provided by the Android Linux kernel. The description and the usage of MLM can be found in [HPCS 2014] and [JCS 2015].
- LLM The Low-Level Measurements (LLM) is a kernel module allowing to measure the energy consumption of CPU on Android devices, by retrieving energy consumption data directly from the battery driver. The description and the usage of LLM is described in [HPCS 2013].
- ES The Energy Simulator (ES) is a Java-based tool for simulating the energy consumption in wired and wireless networks. Simulations based on ES has been described in [AINA 2016], [IGPL 2016], [JHSN 2013] and [AINA 2013].
- MKM+KCT The Monitoring Kernel Module is a kernel module for syscall interception. The Kernel Call Tester is an Android library. They have been used for research activities reported in [PMC 2016], [IJCI 2014] and [IFIP-SEC 2013]. The source code is available at <https://github.com/ai-lab/SEAndroid-Assessment>.
- SoRTGrid SoRTGrid is a framework for the detection of Grid resources and the scheduling of soft real-time jobs. More information on SoRTGrid can be found in [CCPE 2011], [RIV 2010] and [DISI 2010].
- SoRTSim SoRTSim is a discrete-event simulator of Grid networks. It is described in [RIE 2012] and [DISI 2010].
- GridWalker GridWalker is a tool for visualizing Grid resources. It is described in [RIS 2011].
- GEDA The Grid Explorer for Distributed Applications is a tool for the discovery of resources for Grid applications. It works on Grids based on Globus Toolkit 3 or 4. Information on GEDA can be found in [GER 2008], [GADA 2006] and [DISI 2010].
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Teaching Activity

Courses (71)

(2014-) *Assistant Professor*, DIBRIS, University of Genoa.

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
M.Sc. Computer Science	Data Privacy	6	2016/17	now	1
B. Eng. Computer Engineering	Android Programming	6	2014/15	now	3
Ph.D. Computer Science	Mobile Security	3	2014/15	now	3
Postgrad. Diploma in Cyber Security	Web Security	3	2014/15	now	3
Undergrad. Diploma in ICT (ITS-ICT)	MySQL Programming	6	2014/15	now	3
Undergrad. Diploma in ICT (ITS-ICT)	Web Programming	6	2014/15	2014/15	1
<i>Tirocinio Formativo Assistito</i>	Found. of Comp. Science	6	2014/15	2014/15	1
<i>Percorsi Abilitativi Speciali</i>	Found. of Comp. Science	6	2014/15	2014/15	1

(2014-) *Lecturer*, Telecommunication School for Italian Armed Forces, Chiavari, Italy

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
Vocat. Training in ICT Systems	ASP.NET Programming	6	2016/17	now	1
Vocat. Training in ICT Systems	Java Programming	6	2016/17	now	1
Vocat. Training in ICT Systems	Basics of Programming	6	2014/15	now	3
Vocat. Training in ICT Systems	C/C++ Programming	6	2014/15	now	3
Vocat. Training in ICT Systems	Java Programming	6	2011/12	2014/15	4
Postgrad. Diploma in ICT Systems	Computer Security	6	2013/14	2013/14	1
Postgrad. Diploma in ICT Systems	Java Programming	6	2013/14	2013/14	1
Postgrad. Diploma in ICT Systems	Databases	6	2013/14	2013/14	1
Postgrad. Diploma in ICT Systems	Information Systems	6	2013/14	2013/14	1

(2014-2015) *Lecturer*, University of Donjia Gorica, Montenegro

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
Postgraduate Diploma in Cyber Security	Web Security	3	2014/15	2014/15	1

(2011-2014) *Lecturer*, Dep. of Computer Engineering, University of Genoa, Italy

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
B. Eng. Computer Engineering	Web Programming	6	2010/11	2013/2014	4

(2011-2014) *Assistant Professor*, E-Campus University, Novedrate, Italy

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
M.Eng. Computer Engineering	Network Security	6	2014/15	2014/15	1
M.Eng. Computer Engineering	Computer Security	6	2014/15	2014/15	1
M.Eng. Computer Engineering	Java Programming	12	2013/14	2014/15	2
B.Eng. Computer Engineering	Computer Architecture	6	2011/12	2013/14	3
B.Eng. Computer Engineering	Operating Systems	6	2011/12	2013/14	3
B.Eng. Computer Engineering	Found. of Computer Science	12	2011/12	2013/14	3
B.Eng. Civil Engineering	Found. of Computer Science	6	2011/12	2013/14	3
B.Eng. Mechanical Engineering	Found. of Computer Science	6	2011/12	2013/14	3
B.Eng. Computer Engineering	Software Engineering	6	2011/12	2011/12	1
B.Eng. Computer Engineering	Databases	6	2011/12	2011/12	1
BSc. Computer Engineering	Artificial Intelligence	6	2011/12	2011/12	1

(2006-2010) *Teaching Assistant*, DIST, University of Genoa, Italy

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
M. Eng. Computer Engineering	Computer Security	6	2009/10	2010/11	2
B. Eng. Computer Engineering	Web Programming	6	2009/10	2009/10	1

(2006-2010) *Lecturer*, DISI, University of Genoa, Italy

Degree	Course Taught	ECTS	From: (a.y.)	To: (a.y.)	Tot. yrs.
MSc. Computer Science	Distributed Operating Systems	6	2006/07	2007/08	2
BSc. Computer Science	Operating Systems	6	2006/07	2009/10	4

Supervision

PhD. Supervision (2)

- 2017-2019 Doctoral Supervisor of Simone Aonzo (Cycle XXXII), DIBRIS, University of Genoa.
- 2013-2016 Doctoral Supervisor of Luca Verderame (Cycle XXVIII), DIBRIS, University of Genoa.

PostGraduate Diplomas Supervision (7)

- 2015-2016 Advisor of 3 theses of the Postgraduate Diploma in *Cyber Security and Data Protection*, University of Genoa.
- 2013-2014 Advisor of 4 theses at the Postgraduate Diploma in *ICT Systems*, Telecommunication School for Italian Armed Forces, Chiavari, Italy.
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Master Theses Supervision (24)

- 2010 - Advisor of 16 M.Eng. Theses, course of Computer Engineer, DIBRIS, University of Genoa.
- 2011 - 2014 Advisor of 3 M.Eng. Theses, course of Computer Engineer, E-Campus University.
- 2006 - 2010 Advisor of 6 M.Sc. Theses, course of Computer Science, DISI, University of Genoa.
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Bachelor Theses Supervision (189)

- 2010 - Advisor of 155¹ B.Eng. Theses, course of Computer Engineer, DIBRIS, University of Genoa.
- 2011 - 2014 Advisor of 19 B.Eng. Theses, course of Computer Engineer, E-Campus University.
- 2006 - 2010 Advisor of 15 B.Sc. Theses, course of Computer Science, DISI, University of Genoa.
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Last updated: April 9, 2018
by [Alessio Merlo](#)

¹From a.y. 2010/2011 I am advisor of all B.Eng. theses in Computer Engineering at University of Genoa.