

# Publications

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## 1 Peer Reviewed Journals and Book Chapters

1. Alberto Ferrante, Miroslaw Malek, Fabio Martinelli, Francesco Mercaldo, and Jelena Milosevic. *Extinguishing Ransomware - A Hybrid Approach to Android Ransomware Detection*, volume 10723, pages 242–258. Springer International Publishing, Cham, 02/2018 2018
2. Jelena Milosevic, Miroslaw Malek, and Alberto Ferrante. *Runtime Classification of Mobile Malware for Resource-constrained Devices*, volume 764, pages 195–215. Springer International Publishing AG, 2017
3. Antonio Vincenzo Taddeo, Marcello Mura, and Alberto Ferrante. Dynamic adaptation of security and QoS in energy-harvesting sensors nodes. In MohammadS. Obaidat, GeorgeA. Tsihrintzis, and Joaquim Filipe, editors, *e-Business and Telecommunications*, volume 222 of *Communications in Computer and Information Science*, pages 243–258. Springer Berlin Heidelberg, 2012
4. Christian Gamrat, Jean-Marc Philippe, Chris Jesshope, Alex Shafarenko, Labros Bisdounis, Umberto Bondi, Alberto Ferrante, Joan Cabestany, Michael Huebner, Juha Parsinnen, Jiri Kadlec, Martin Danek, Benoit Tain, Susan Eisenbach, Michel Auguin, Jean-Philippe Diguët, Eric Lenormand, and Jean-Luc Roux. Aether: Self-adaptive networked entities: Autonomous computing elements for future pervasive applications and technologies. In Joao M. P. Cardoso and Michael Huebner, editors, *Reconfigurable Computing: From FPGAs to Hardware/Software Codesign*, pages 149–184. Springer, New York, USA, 2011
5. Onur Derin, Alberto Ferrante, and Antonio Vincenzo Taddeo. Coordinated management of hardware and software self-adaptivity. In *Journal of System Architectures*, volume 55, pages 170–179. Elsevier North-Holland, Inc., New York, NY, USA, 2009
6. Alberto Ferrante, Satish Chandra, and Vincenzo Piuri. IPSec database query acceleration. In Mohammad S. Obaidat Joaquim Filipe, editor, *Communications in Computer and Information Science*, volume 23, pages 188–200. Springer, 11 2008
7. Vincenzo Piuri Antonio Vincenzo Taddeo, Alberto Ferrante. Scheduling Small Packets in IPSec Multi-accelerator Based Systems. In *Journal of Communications (JCM)*, volume 2, pages 53–60. Academy Publisher, March 2007

## 2 Peer Reviewed Conferences and Workshops

1. Filippo Maria Bianchi, Lorenzo Livi, Alberto Ferrante, Jelena Milosevic, and Miroslaw Malek. Time series kernel similarities for predicting paroxysmal atrial fibrillation from ecgs. In *IJCNN 2018 : International Joint Conference on Neural Networks*, Rio, Brazil, 07/2018 In Press. IEEE, IEEE
2. Jelena Milosevic, Miroslaw Malek, and Alberto Ferrante. A friend or a foe? detecting malware using memory and cpu features. In *SECURITY 2016, 13th International Conference on Security and Cryptography*, Lisbon, Portugal, 07/2016 2016. SciTePress Digital Library, SciTePress Digital Library
3. Jelena Milosevic, Alberto Ferrante, and Miroslaw Malek. Malware: Effective and efficient run-time mobile malware detector. In *The 14th IEEE International Conference on Dependable, Autonomic and Secure Computing (DASC 2016)*, Auckland, New Zealand, 08/2016 2016. IEEE Computer Society Press, IEEE Computer Society Press

4. Alberto Ferrante, Francesco Mercaldo, Jelena Milosevic, and Corrado Aaron Visaggio. Spotting the malicious moment: Characterizing malware behavior using dynamic features. In Eric Medvet, editor, *2016 11th International Conference on Availability, Reliability and Security (ARES)*, Salzburg, Austria, 08/2016 2016
5. Jelena Milosevic, Alberto Ferrante, and Miroslaw Malek. Trojan families identification using dynamic features and low complexity classifiers. In *24th EICAR Annual Conference 2016 "Trustworthiness in IT Security Products"*, Nuremberg, Germany, 10/2016 2016. EICAR, EICAR
6. Jelena Milosevic, Alberto Ferrante, and Miroslaw Malek. What does the memory say? towards the most indicative features for efficient malware detection. In *CCNC 2016, The 13th Annual IEEE Consumer Communications & Networking Conference*, Las Vegas, NV, USA, 01/2016 2016. IEEE Communication Society, IEEE Communication Society
7. Jelena Milosevic, Alberto Ferrante, and Miroslaw Malek. Can we achieve both privacy protection and efficient malware detection on smartphones? In *1st Interdisciplinary Cyber Research Workshop 2015*, Tallin, Estonia, 07/2015 2015. Tallinn University of Technology, Tallinn University of Technology
8. Jelena Milosevic, Alberto Ferrante, and Miroslaw Malek. A general practitioner or a specialist for your infected smartphone?, 05/2015 2015. Poster at the 36th IEEE Symposium on Security and Privacy, San Jose, CA, USA
9. Jelena Milosevic, Alberto Ferrante, and Francesco Regazzoni. Security challenges for hardware designers of mobile systems. In *2015 Mobile Systems Technologies Workshop (MST)*, May 2015
10. Jelena Milosevic, Andreas Dittrich, Alberto Ferrante, and Miroslaw Malek. A resource-optimized approach to efficient early detection of mobile malware. In *3rd International Workshop on Security of Mobile Applications - IWSMA 2014*, Fribourg, Switzerland, September 2014
11. Jelena Milosevic, Andreas Dittrich, Alberto Ferrante, Miroslaw Malek, Camilo Rojas Quiros, Rubén Braojos, Giovanni Ansaloni, and David Atienza. Risk assessment of atrial fibrillation: a failure prediction approach. In *Computing in Cariology (CinC)*, Cambridge, MA, USA, September 2014
12. Alberto Ferrante, Igor Kaitović, and Jelena Milosevic. Modeling requirements for security-enhanced design of embedded systems. In *ICETE SECRYPT*, Vienna, Austria, August 2014. ICETE, ICETE
13. Alberto Ferrante, Jelena Milosevic, and Marija Janjusevic. A security-enhanced design methodology for embedded systems. In *SECRYPT 2013*, Reykjavik, Iceland, July 2013
14. Alberto Ferrante, Massimo Chelodi, Francesco Bruschi, and Valeria Mozzetti. An algorithm for extended dynamic range video in embedded systems. In *SENSORNETS 2013*, Barcelona, Spain, February 2013
15. Leandro Fiorin, Alberto Ferrante, Konstantinos Padarnitsas, and Francesco Regazzoni. Security enhanced linux on embedded systems: A hardware-accelerated implementation. In *ASP-DAC*, pages 29–34. IEEE, 2012
16. Antonio Vincenzo Taddeo, Luis Germán García Morales, and Alberto Ferrante. A framework for security and workload gradual adaptation. In *SECRYPT 2011 - Proceedings of the International Conference on Security and Cryptography, Seville, Spain, 18 - 21 July, 2011, SECRYPT is part of ICETE - The International Joint Conference on e-Business and Telecommunications*
17. Antonio Vincenzo Taddeo, Luis Germán Garcia, and Alberto Ferrante. System policies for gradual tuning of security and workload in wireless sensor networks. In *Proceedings of the IEEE Wireless Telecommunication Symposium (WTS)*, New York, USA, April 2011
18. Leandro Fiorin, Alberto Ferrante, Kostas Padarnitsas, and Stefano Carucci. Hardware-assisted security enhanced linux in embedded systems: a proposal. In *Proceedings of the 5th Workshop on Embedded Systems Security (WESS'2010)*, Scottsdale, Arizona, USA, October 24 2010
19. Antonio Vincenzo Taddeo, Marcello Mura, and Alberto Ferrante. Qos and security in energy-harvesting wireless sensor networks. In *Proceedings of ICETE SECRYPT*, Athens, Greece, July 2010

20. Antonio Vincenzo Taddeo, Laura Micconi, and Alberto Ferrante. Gradual adaptation of security for sensor networks. In *IEEE WoWMoM 2010: Proceedings of the IEEE International Symposium on a World of Wireless Mobile and Multimedia Networks*, Montreal, Canada, June 13 2010
21. Onur Derin and Alberto Ferrante. Scheduling energy consumption with local renewable micro-generation and dynamic electricity prices. In *CPSWEEK/GREEMBED 2010: Proceedings of the First Workshop on Green and Smart Embedded System Technology: Infrastructures, Methods and Tools*, Stockholm, Sweden, April 2010
22. Onur Derin and Alberto Ferrante. Enabling self-adaptivity in component-based streaming applications. In *APRES '09: Proceedings of the 2nd Workshop on Adaptive and Reconfigurable Embedded Systems*, Grenoble, France, October 11 2009
23. A.V. Taddeo and A. Ferrante. Security and packets delivery trade-off for wsn. In *Consumer Communications and Networking Conference (CCNC), 2010 7th IEEE*, pages 1 –2, jan. 2010
24. Antonio Vincenzo Taddeo, Pierpaolo Marcon, and Alberto Ferrante. Negotiation of security services: a multi-criteria decision approach. In *Proceedings of the 4th Workshop on Embedded Systems Security, WESS '09*, pages 4:1–4:9, New York, NY, USA, 2009. ACM
25. Antonio Vincenzo Taddeo and Alberto Ferrante. Run-time selection of security algorithms for networked devices. In *Proceedings of the 5th ACM symposium on QoS and security for wireless and mobile networks, Q2SWinet '09*, pages 92–96, New York, NY, USA, 2009. ACM
26. Onur Derin and Alberto Ferrante. Simulation of a self-adaptive run-time environment with hardware and software components. In *SINTER '09: Proceedings of the 2009 ESEC/FSE workshop on Software integration and evolution @ runtime*, pages 37–40, Amsterdam, The Netherlands, August 2009. ACM
27. A.V. Taddeo and A. Ferrante. A security service protocol for manets. In *Consumer Communications and Networking Conference, 2009. CCNC 2009. 6th IEEE*, Jan. 2009
28. Alberto Ferrante, Roberto Pompei, Anastasia Stulova, and Antonio Taddeo. A protocol for pervasive distributed computing reliability. In *IEEE International Workshop on Security and Privacy in Wireless and Mobile Computing, Networking and Communications*, Avignon, France, October 2008. IEEE Communications Society
29. Alberto Ferrante, Satish Chandra, and Vincenzo Piuri. A Query Unit for the IPsec Databases. In *SECRYPT-2007*, Barcelona, Spain, July 2007
30. Luigi Dadda, Alberto Ferrante, and Marco Macchetti. A Memory Unit for Priority Management in IPsec Accelerators. In *ICC07*, Glasgow, Scotland, 24 June 2007. IEEE Communications Society
31. Alberto Ferrante, Antonio Vincenzo Taddeo, Mariagiovanna Sami, Fabrizio Mantovani, and Juris Fridkins. Self-adaptive Security at Application Level: a Proposal. In *ReCoSoC 2007*, June 2007
32. Alberto Ferrante and Vincenzo Piuri. High-level Architecture of an IPsec-dedicated System on Chip. In *NGI 2007*, pages 159–166, Trondheim, Norway, May 2007. IEEE Press
33. Antonio Vincenzo Taddeo, Alberto Ferrante, and Vincenzo Piuri. Scheduling Small Packets in IPsec-based Systems. In *CCNC 2006*, Las Vegas, NV, USA, 8 January 2006. IEEE
34. Alberto Ferrante, Vincenzo Piuri, and Fabien Castanier. A QoS-enabled Packet Scheduling Algorithm for IPsec Multi-accelerator Based Systems. In *Computing Frontiers*, pages 221–229, Ischia, Italy, May 2005. ACM
35. Alberto Ferrante, Vincenzo Piuri, and Jeff Owen. IPsec Hardware Resource Requirements Evaluation. In *NGI 2005*, Rome, Italy, 18 April 2005. EuroNGI
36. Alberto Ferrante, Giuseppe Piscopo, and Stefano Scaldaferrì. Application-driven Optimization of VLIW Architectures: a Hardware-Software Approach. In *Real-Time and Embedded Technology Applications*, pages 128–137, San Francisco, CA, USA, 7 March 2005. IEEE Computer Society

37. Alberto Ferrante, Uljana Boiko, Antonietta Lo Duca, and Vincenzo Piuri. A Testing Methodology for IPSec-based Systems. In *SoftCOM 2004*, pages 22–26, Dubrovnik and Split, Croatia, Venice, Italy, October 2004. University of Split. Sponsored by the IEEE Communication Society and by the UNESCO Communication and Information Society
38. Fabien Castanier, Alberto Ferrante, and Vincenzo Piuri. A Packet Scheduling Algorithm for IPSec Multi-Accelerator Based Systems. In *ASAP 2004*, pages 387–397, Galveston, TX, USA, September 2004. IEEE Computer Society Press