

Active learning-based mobile malware detection utilizing auto-labeling and data drift detection

Deng, Zhe; Hubert, Arthur; **Ben Yahia, Sadok; Bahsi, Hayretdin** Proceedings of the 2024 IEEE International Conference on Cyber Security and Resilience, CSR 2024 2024 / p. 146 - 151 <https://doi.org/10.1109/CSR61664.2024.10679343> [Article at Scopus](#) [Article at WOS](#)

Alliance attribution of global cyber attacks : the European Union

Alatalu, Siim National cyber emergencies: the return to civil defence 2020 / p. 171-185 <https://doi.org/10.4324/9780429343438>

Android malware concept drift using system calls : detection, characterization and challenges

Guerra Manzanares, Alejandro; Luckner, Marcin; **Bahsi, Hayretdin** Expert systems with applications 2022 / art. 117200, 19 p. : ill <https://doi.org/10.1016/j.eswa.2022.117200> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Art and automation of teaching malware reverse engineering

Lepik, Toomas; Maennel, Kaie; Ernits, Margus; Maennel, Olaf Manuel Learning and Collaboration Technologies : Learning and Teaching : 5th International Conference : LCT 2018, Held as Part of HCI International 2018, Las Vegas, NV, USA, July 15-20, 2018 : Proceedings, Part II 2018 / p. 461-472 https://doi.org/10.1007/978-3-319-91152-6_35 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Conference Proceedings at WOS](#) [Article at WOS](#)

Arvuti riistvarasse peidetud troojalane pakub häkkeritele hõlbuelu [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 ["Arvuti riistvarasse peidetud troojalane pakub häkkeritele hõlbuelu"](#)

Assessment of malicious tweets impact on stock market prices

Ishikawa, Tatsuki; Ben Sassi, Imen; Ben Yahia, Sadok Research Challenges in Information Science : 15th International Conference, RCIS 2021, Limassol, Cyprus, May 11–14, 2021 : proceedings 2021 / p. 330–346 https://doi.org/10.1007/978-3-030-75018-3_22 [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Benchmarking advanced security closure of physical layouts

Eslami, Mohammad; Knechtel, Johann; Sinanoglu, Ozgur; Karri, Ramesh; **Pagliarini, Samuel Nascimento** ISPD '23 : proceedings of the 2023 International Symposium on Physical Design 2023 / p. 256-264 <https://doi.org/10.1145/3569052.3578924> <https://dl.acm.org/doi/pdf/10.1145/3569052.3578924>

Concept drift and cross-device behavior : challenges and implications for effective android malware detection

Guerra Manzanares, Alejandro; Luckner, Marcin; Bahsi, Hayretdin Computers & Security 2022 / art. 102757, 20 p. : ill <https://doi.org/10.1016/j.cose.2022.102757> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Corrigendum to Concept drift and cross-device behavior: Challenges and implications for effective android malware detection Computers & Security, Volume 120, 102757 (Computers & Security (2022) 120, (S0167404822001523), (10.1016/j.cose.2022.102757))

Guerra-Manzanares, Alejandro; Luckner, Marcin; **Bahsi, Hayretdin** Computers and Security 2023 / art. 102998 <https://doi.org/10.1016/j.cose.2022.102998> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Cross-device behavioral consistency : benchmarking and implications for effective android malware detection

Guerra Manzanares, Alejandro; Vålbe, Martin Machine Learning with Applications 2022 / art. 100357, 15 p. : ill <https://doi.org/10.1016/j.mlwa.2022.100357>

Differences in Android behavior between real device and emulator : a malware detection perspective

Guerra Manzanares, Alejandro; Bahsi, Hayretdin; Nömm, Sven 6th International Conference on Internet of Things: Systems, Management and Security (IOTSMS), Granada, Spain, October 22-25, 2019 2019 / art. 8939268, p. 399-404 <https://doi.org/10.1109/IOTSMS48152.2019.8939268>

Experts still needed : boosting long-term android malware detection with active learning

Guerra-Manzanares, Alejandro; Bahsi, Hayretdin Journal of Computer Virology and Hacking Techniques 2024 / p. 901 - 918 <https://doi.org/10.1007/s11416-024-00536-y> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Explainable federated learning for Botnet Detection in IoT networks

Kalakoti, Rajesh; Bahsi, Hayretdin; Nömm, Sven Proceedings of the 2024 IEEE International Conference on Cyber Security and Resilience (CSR), September 2-4, 2024, London, UK 2024 / p. 22-29 <https://doi.org/10.1109/CSR61664.2024.10679348> [Article at Scopus](#) [Article at WOS](#)

Improving IoT security with explainable AI : quantitative evaluation of explainability for IoT botnet detection

Kalakoti, Rajesh; Bahsi, Hayretdin; Nömm, Sven IEEE Internet of Things Journal 2024 / p. 18237 - 18254 <https://doi.org/10.1109/JIOT.2024.3360626> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

In-depth feature selection and ranking for automated detection of mobile malware

Guerra Manzanares, Alejandro; Nömm, Sven; Bahsi, Hayretdin Proceedings of the 5th International Conference on Information Systems Security and Privacy : ICISPP 2019 : February 23-25, 2019, Prague, Czech Republic. Vol. 1 2019 / p. 274-283 : ill

<https://doi.org/10.5220/0007349602740283>

KronoDroid : time-based hybrid-featured dataset for effective android malware detection and characterization

Guerra Manzanares, Alejandro; **Bahsi, Hayret**din; **Nömm, Sven** Computers & Security 2021 / art. 102399, 32 p

<https://doi.org/10.1016/j.cose.2021.102399> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Küberohud meie nina all: 4 igapäevast turvariski, mida tõsiselt ei võeta [Võrguväljaanne]

digipro.geenius.ee 2022 [Küberohud meie nina all: 4 igapäevast turvariski, mida tõsiselt ei võeta](#)

Latest trends in hardware security and privacy

Di Natale, Giorgio; Regazzoni, Francesco; Albanese, Vincent; Lhermet, Frank; Loisel, Yann; Sensaoui, Abderrahmane; **Pagliarini, Samuel Nascimento** 33rd IEEE International Symposium on Defect and Fault Tolerance in VLSI and Nanotechnology Systems (DFT) : ESA-ESRIN, Italy (On-line Virtual Event), October 19–21, 2020 2020 / 4 p. : ill <https://doi.org/10.1109/DFT50435.2020.9250816>

Leveraging the first line of defense : a study on the evolution and usage of android security permissions for enhanced android malware detection

Guerra Manzanares, Alejandro; Luckner, Marcin; **Bahsi, Hayret**din Journal of Computer Virology and Hacking Techniques 2022 / 32 p. : ill <https://doi.org/10.1007/s11416-022-00432-3> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning for android malware detection : mission accomplished? a comprehensive review of open challenges and future perspectives

Guerra-Manzanares, Alejandro Computers and Security 2024 / art. 103654 <https://doi.org/10.1016/j.cose.2023.103654> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Machine learning-based detection and characterization of evolving threats in mobile and IoT Systems = Masinõppepõhine arenevate ohtude tuvastamine ning kirjeldamine mobiilseadmete ja värgvõrkude jaoks

Guerra Manzanares, Alejandro 2022 <https://doi.org/10.23658/taltech.54/2022> <https://digikogu.taltech.ee/et/Item/f56ae778-e5a5-4147-a8e4-4833e08fa789> https://www.ester.ee/record=b5511898*est

Mobiilse pahavara plahvatusele võib pakkuda leevendust masinõpe [Võrguväljaanne]

Oidermaa, Jaan-Juhan novaator.err.ee 2022 [Mobiilse pahavara plahvatusele võib pakkuda leevendust masinõpe](#)

Network IDS alert classification with active learning techniques

Vaarandi, Risto; Guerra-Manzanares, Alejandro Journal of Information Security and Applications 2024 / art. 103687

<https://doi.org/10.1016/j.jisa.2023.103687> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the application of active learning to handle data evolution in Android malware detection

Guerra Manzanares, Alejandro; **Bahsi, Hayret**din Digital forensics and cyber crime : 13th EAI international conference, ICDF2C 2022, Boston, MA, November 16-18, 2022 : proceedings 2023 / p. 256-273 https://doi.org/10.1007/978-3-031-36574-4_15

On the relativity of time : implications and challenges of data drift on long-term effective android malware detection

Guerra Manzanares, Alejandro; **Bahsi, Hayret**din Computers & Security 2022 / art. 102835, 15 p. : ill

<https://doi.org/10.1016/j.cose.2022.102835> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

On the use of defensive schemes for hardware security = Kaitseskeemid riistvara turvalisuse tagamiseks

Eslami, Mohammad 2024 https://www.ester.ee/record=b5701420*est <https://doi.org/10.23658/taltech.53/2024>

<https://digikogu.taltech.ee/et/Item/068530be-4810-4489-9604-fb838d298b45>

Ransomware attack as Hardware Trojan : a feasibility and demonstration study

Almeida, Felipe; **Imran, Malik**; **Raik, Jaan**; **Pagliarini, Samuel Nascimento** IEEE Access 2022 / p. 44827-44839

<https://doi.org/10.1109/ACCESS.2022.3168991> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Reusing verification assertions as security checkers for Hardware Trojan detection

Eslami, Mohammad; **Ghasempouri, Tara**; **Pagliarini, Samuel Nascimento** 2022 23rd International Symposium on Quality Electronic Design (ISQED), Santa Clara, CA, USA : 06-07 April 2022 2022 / p. 1-6 : ill

<https://doi.org/10.1109/ISQED54688.2022.9806292>

SALSy : security-aware layout synthesis

Eslami, Mohammad; **Perez, Tiago Diadami**; **Pagliarini, Samuel Nascimento** arXiv.org 2024 / 13 p. : ill

<https://doi.org/10.48550/arXiv.2308.06201>

SCARF : securing chips with a robust framework against fabrication-time hardware trojans

Eslami, Mohammad; **Ghasempouri, Tara**; **Pagliarini, Samuel Nascimento** IEEE Transactions on Computers 2024 / p. 2761-

2775 <https://doi.org/10.1109/TC.2024.3449082> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

SCARF : securing chips with a robust framework against fabrication-time hardware Trojans : preprint
Eslami, Mohammad; Ghasempouri, Tara; Pagliarini, Samuel Nascimento arXiv.org 2024 / 14 p. : ill
<https://doi.org/10.48550/arXiv.2402.12162>

Signature-based approach to detecting malicious outgoing traffic

Petliak, Nataliia; Klots, Yuri; Titova, Vira; Cheshun, Viktor; **Boyarchuk, Artem** IntellTSIS 2023: Intelligent Information Technologies & Systems of Information Security 2023 : proceedings of the 4th International Workshop on Intelligent Information Technologies & Systems of Information Security : Khmelnytskyi, Ukraine, March 22-24, 2023 2023 / p. 486 - 506 <https://ceur-ws.org/Vol-3373/paper33.pdf> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

Time-frame analysis of system calls behavior in machine learning-based mobile malware detection

Guerra Manzanares, Alejandro; Nömm, Sven; Bahsi, Hayretdin 2019 International Conference on Cyber Security for Emerging Technologies : CSET 2019, Doha, Qatar, 27 October 2019 through 29 October 2019 2019 / art. 89049088 ; 8 p. : ill
<https://doi.org/10.1109/CSET.2019.8904908>