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Gradul didactic: **Conf.Dr.Ing.**
Instituția unde este titular: **Universitatea Tehnică din Cluj-Napoca**
Facultatea: **Facultatea de Automatică și Calculatoare**
Departamentul: **CALCULATOARE**

LISTA lucrărilor științifice

A. Teza de doctorat

“Machine Learning Techniques for the Analysis and Detection of Malicious Software”

Conducător științific: *Prof.Dr.Ing. Gheorghe Sebestyen*

Universitatea: *Universitatea Tehnică din Cluj-Napoca*

Susținere publică: *2016*

B. Cărți și capitole în cărți

CĂRȚI

1. **Ciprian Oprisa**. Machine learning techniques for the analysis and detection of malicious software. In *ISBN 978-606-737-511-4*. UTPRESS, 2021
2. **Ciprian Oprisa**, and Adrian Colesă. Sisteme de operare - îndrumător de laborator. In *ISBN 978-606-737-512-1*. UTPRESS, 2021
3. **Ciprian Oprisa**, Anca Hangan, Madalin Neagu, Emil Cebuc, and Gheorghe Sebestyen. Programare în limbaj de asamblare. In *ISBN 978-606-737-333-2*. UTPRESS, 2018

C. Lucrări indexate ISI/BDI

c1) Articole / studii publicate la conferințe indexate sau în reviste de specialitate de circulație internațională recunoscute (cotate ISI)

1. Remus M Petrache, **Ciprian Oprisa**, and Camelia Lemnaru. Unveiling hidden structures: Multi-platform iot malware analysis using graph embeddings. In *IEEE Access*. IEEE, 2025
2. Diana-Elena Petrean, Rodica Potolea, and **Ciprian Oprisa**. Packed code detection using shannon entropy and homomorphic encrypted executables. In *2024 IEEE 20th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 2025–08–01 00:00:00. IEEE, 2024
3. Andrei Dumitras, Cristinel Mihai Mocan, and **Ciprian Oprisa**. A feature engineering approach for detecting phishing emails. In *2024 IEEE 20th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 2025–08–01 00:00:00. IEEE, 2024
4. Alexandru Alin Jircan, and **Ciprian Oprisa**. Mephisto: a red team tool for offensive security. In *2024 IEEE 20th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 2025–06–01 00:00:00. IEEE, 2024
5. Codrut-Georgian Artene, **Ciprian Oprisa**, Cristian Nicolae Butincu, and Florin Leon. Finding patient zero and tracking narrative changes in the context of online disinformation using semantic similarity analysis. *Mathematics*, 11(9):2053, 2023
6. Andrei Vasile Mihalca, and **Ciprian Pavel Oprisa**. Impact of library code in binary similarity systems. In *International Conference on Ubiquitous Security*, pages 31–44. Springer Nature Singapore Singapore, 2023
7. Andrei Mihalca, **Ciprian Oprisa**, and Rodica Potolea. Hunting for malware code in massive collections. In *2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, pages 1–6. IEEE, 2020
8. Francisc Moldovan, Paul Satmarean, and **Ciprian Oprisa**. An analysis of http attacks on home iot devices. In *2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, pages 1–6. IEEE, 2020

9. Andrei Crisan, Gabriel Florea, Lorand Halasz, Camelia Lemnaru, and **Ciprian Oprisa**. Detecting malicious urls based on machine learning algorithms and word embeddings. In *2020 IEEE 16th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 187–193. IEEE, 2020
10. Ovidiu Valea, and **Ciprian Oprisa**. Towards pentesting automation using the metasploit framework. In *2020 IEEE 16th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 171–178. IEEE, 2020
11. Paul Satmarean, and **Ciprian Oprisa**. Web servers protection using anomaly detection for http requests. In *Computer Security: ESORICS 2019 International Workshops, IOSec, MSTEC, and FINSEC, Luxembourg City, Luxembourg, September 26–27, 2019, Revised Selected Papers 2*, pages 77–90. Springer International Publishing, 2020
12. Dan Domnita, and **Ciprian Oprisa**. A genetic algorithm for obtaining memory constrained near-perfect hashing. In *2018 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, pages 1–6. IEEE, 2018
13. Francisc Moldovan, and **Ciprian Oprisa**. A framework for threats analysis using software-defined networking. In *2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 451–457. IEEE, 2018
14. Alexru Mihai Lungana-Niculescu, Adrian Colesa, and **Ciprian Oprisa**. False positive mitigation in behavioral malware detection using deep learning. In *2018 IEEE 14th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 197–203. IEEE, 2018
15. **Ciprian Oprisa**, George Cabau, and Gheorghe Sebestyen Pal. Malware clustering using suffix trees. *Journal of Computer Virology and Hacking Techniques*, 12:1–10, 2016
16. **Ciprian Oprisa**, Dragos Gavrilit, and George Cabau. A scalable approach for detecting plagiarized mobile applications. *Knowledge and Information Systems*, 49(1):143–169, 2016
17. George Cabau, Magda Buhu, and **Ciprian Oprisa**. Malware classification using filesystem footprints. In *2016 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, pages 1–6. IEEE, 2016
18. George Cabau, Magda Buhu, and **Ciprian Pavel Oprisa**. Malware classification based on dynamic behavior. In *2016 18th international symposium on symbolic and numeric algorithms for scientific computing (synasc)*, pages 315–318. IEEE, 2016
19. **Ciprian Oprisa**. A minhash approach for clustering large collections of binary programs. In *2015 20th International Conference on Control Systems and Computer Science*, pages 157–163. IEEE, 2015
20. **Ciprian Oprisa**, George Cabau, and Gheorghe Sebestyen Pal. Semi-automated verdicts assignment for potentially malicious programs. In *2015 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 125–130. IEEE, 2015
21. **Ciprian Oprisa**, and Nicolae Ignat. A measure of similarity for binary programs with a hierarchical structure. In *2015 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 117–123. IEEE, 2015
22. **Ciprian Oprisa**, Marius Checiches, and Adrian Nandrea. Locality-sensitive hashing optimizations for fast malware clustering. In *2014 IEEE 10th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 97–104. IEEE, 2014
23. **Ciprian Oprisa**, George Cabau, and Gheorghe Sebestyen Pal. A new string distance for computing binary code similarities. In *2014 IEEE 10th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 91–96. IEEE, 2014
24. **Ciprian Oprisa**, George Cabau, and Adrian Colesa. Automatic code features extraction using bio-inspired algorithms. *Journal of Computer Virology and Hacking Techniques*, 10(3):165–176, 2014
25. **Ciprian Oprisa**, George Cabau, and Adrian Colesa. From plagiarism to malware detection. In *2013 15th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing*, pages 227–234. IEEE, 2013
26. Cristina Bianca Pop, Viorica Rozina Chifu, Ioan Salomie, Mihaela Dinsoreanu, Tudor David, Vlad Acretoaie, Aliz Nagy, and **Ciprian Oprisa**. Biologically-inspired clustering of semantic web services. birds or ants intelligence? *Concurrency and Computation: Practice and Experience*, 24(6):619–633, 2012

27. **Ciprian Oprisa**, Adrian Colesă, and Iosif Ignat. A metric for evaluating the usability of file systems. In *2012 14th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing*, pages 179–186. IEEE, 2012

c2) Studii publicate la conferințe sau în reviste indexate în baze de date internaționale de referință în domeniul Calculatoare și Tehnologia Informației (DBLP, ACM, IEEE, SCOPUS)

1. Bianca Alexandra Grama, and **Ciprian Oprisa**. A virtual machine management platform in computer science education. In *2024 11th International Conference on Electrical and Electronics Engineering (ICEEE)*, pages 116–121. IEEE, 2024
2. Marius Marmureanu, and **Ciprian Oprisa**. Mitre tactics inference from splunk queries. In *2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 277–283. IEEE, 2023
3. Victor Mosolea, and **Ciprian Oprisa**. Detecting domain generation algorithms in malware traffic using constrained resources. In *2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 195–202. IEEE, 2023
4. Aralda Pacurar, and **Ciprian Oprisa**. Using artificial intelligence to fight clickbait in romanian news articles. In *2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)*, pages 397–404. IEEE, 2023
5. Robert Rentea, and **Ciprian Oprisa**. Fast clustering for massive collections of malicious urls. In *2021 IEEE 17th International Conference on Intelligent Computer Communication and Processing (ICCP)*, page 43405. IEEE, 2021
6. Andrei Mihalca, and **Ciprian Oprisa**. Full content search in malware collections. In *Information and Operational Technology Security Systems: First International Workshop, IOSec 2018, CIPSEC Project, Heraklion, Crete, Greece, September 13, 2018, Revised Selected Papers 1*, pages 134–145. Springer International Publishing, 2019
7. **Ciprian Oprisa**, George Cabau, and Gheorghe Sebestyen Pal. Multi-centroid cluster analysis in malware research. In *EVOLVE-A Bridge between Probability, Set Oriented Numerics, and Evolutionary Computation VI*, pages 94–103. Springer International Publishing, 2018
8. Aliz Nagy, **Ciprian Oprisa**, Ioan Salomie, Cristina Bianca Pop, Viorica Rozina Chifu, and Mihaela Dinsoreanu. Particle swarm optimization for clustering semantic web services. In *2011 10th international symposium on parallel and distributed computing*, pages 170–177. IEEE, 2011

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