

Universitatea "Aurel Vlaicu" din Arad
Facultatea Științe Exacte
Departament Matematică-Informatică
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L I S T A LUCRĂRILOR ȘTIINȚIFICE

A. Teza de doctorat

“Securitatea informației economice în rețele de calculatoare”

Academia de Studii Economice București, anul 2005

Facultatea de Cibernetică, Statistică și Informatica Economică

Conducător științific : Prof. Univ. Dr. Ion Gh. Roșca

B. Cărți publicate

a. Cărți și capitole în cărți publicate la edituri naționale

1. **Dominic Bucerzan**, Ana Vulpe *“Lecții de Excel”*
Editura Albastră – Cluj Napoca, 2004, 400 pagini, ISBN 973-650-075-6
2. **Dominic Bucerzan**, Ana Vulpe *“Lecții de Word”*
Editura Albastră – Cluj Napoca, 2002, 265 pagini, ISBN 973-650-089-6
3. **Dominic Bucerzan**, Ana Vulpe *“Lecții de utilizare a calculatoarelor”*
Editura Albastră – Cluj Napoca, 2002, 278 pagini, ISBN 973-650-061-6
4. Ana Vulpe, **Dominic Bucerzan** *“Lecții de FoxPro”*
Editura Albastră – Cluj Napoca, 2000, 282 pagini, ISBN 973-9215-57-2

C. Articole/studii *in extenso* publicate în reviste din fluxul științific internațional

a. Articole științifice publicate în reviste de specialitate cotate ISI

1. Bejan, C.A., Muntean, M., **Bucerzan, D.**, Stoian, C.D. (2024).
“Considerations About the Regulatory Framework of Cryptocurrency”.
In: Ciurea, C., Pocatilu, P., Filip, F.G. (eds) Proceedings of 22nd International Conference on Informatics in Economy (IE 2023). Smart Innovation, Systems and Technologies, vol 367. Springer, Singapore. https://doi.org/10.1007/978-981-99-6529-8_14
2. Crina Anina Bejan, **Dominic Bucerzan** & Mihaela Daciana Crăciun (2023)
“Bitcoin price evolution versus energy consumption; trend analysis”,
Applied Economics, 55:13, 1497-1511, DOI: 10.1080/00036846.2022.2097194
Factor de impact IF(2021)= 1.916, scor absolut de influență AIS (2021)= 0,429
3. Bejan, C.A., **Bucerzan, D.**, Crăciun, M.D. (2023).
“Perspectives of Cryptocurrency Price Prediction”.
In: Ciurea, C., Pocatilu, P., Filip, F.G. (eds) Education, Research and Business Technologies. Smart Innovation, Systems and Technologies, vol 321. Springer, Singapore.
https://doi.org/10.1007/978-981-19-6755-9_27

4. Dăuș, L., Drăgoi, VF., Jianu, M., **Bucerzan, D.**, Beiu, V. (2023). “*On the Roots of Certain Reliability Polynomials*” In: Dzitac, S., Dzitac, D., Filip, F.G., Kacprzyk, J., Manolescu, MJ., Oros, H. (eds) Intelligent Methods Systems and Applications in Computing, Communications and Control. ICCCC 2022. Print ISBN 978-3-031-16683-9 Advances in Intelligent Systems and Computing, vol 1435. Springer, Cham. https://doi.org/10.1007/978-3-031-16684-6_34

5. **Bucerzan, D.**, Bejan, C.A. (2021). “*Blockchain. Today Applicability and Implications*”. In: Balas, V., Jain, L., Balas, M., Shahbazova, S. (eds) Soft Computing Applications. SOFA . Advances in Intelligent Systems and Computing, vol 1221. Springer, Cham. https://doi.org/10.1007/978-3-030-51992-6_13

6. Drăgoi V., Cayrel PL, Colombier, B., **Bucerzan D.** , Hoara S. (2020) “*Solving a Modified Syndrome Decoding Problem using Integer Programming.*” International Journal of Computers Communications & Control, ISSN 1841-9836, E-ISSN 1841-9844, Vol. 15(5):, October 2020, Factor de impact IF=2,093
DOI: 10.15837 /ijccc.2020.5.3920, WOS:000569021200006
<http://univagora.ro/jour/index.php/ijccc/article/view/3920/1589>

7. Drăgoi V., Beiu V., **Bucerzan D.** (2019) “*Vulnerabilities of the McEliece Variants Based on Polar Codes*” In: Lanet JL., Toma C. (eds) Innovative Security Solutions for Information Technology and Communications. SECITC 2018. Lecture Notes in Computer Science, vol 11359. Springer, Cham, ISBN: 978-3-030-12941-5, https://doi.org/10.1007/978-3-030-12942-2_29, https://link.springer.com/chapter/10.1007/978-3-030-12942-2_29

8. **D. Bucerzan**, V. Dragoi, P.-L. Cayrel, T. Richmond, “*Improved Timing Attacks against the Secret Permutation in the McEliece PKC*”, International Journal of Computers Communications & Control, ISSN 1841-9836, E-ISSN 1841-9844, Vol. 12(1): pag. 7-25, February 2017, Factor de impact **IF=0,627**
<http://univagora.ro/jour/index.php/ijccc/article/view/2780/1057>

9. **Dominic Bucerzan**, Vlad Dragoi, Tania Richmond. The simple roots problem. Proceedings of the Romanian Academy, Series A, 2017, Volume 18 (Special issue 2017, Cryptology Science), pp. 317-332, <https://acad.ro/sectii2002/proceedings/doc2017-4s/03artSupl.pdf>

10. **Bucerzan D.**, Dragoi V., Kalachi H.T. (2017) Evolution of the McEliece Public Key Encryption Scheme. In: Farshim P., Simion E. (eds) Innovative Security Solutions for Information Technology and Communications. SecITC 2017. Lecture Notes in Computer Science, vol 10543. Springer, Cham., ISBN: 978-3-319-69283-8, https://doi.org/10.1007/978-3-319-69284-5_10, https://link.springer.com/chapter/10.1007/978-3-319-69284-5_10

11. **D. Bucerzan**, C. Rațiu, “*Image Processing with Android Steganography*” Soft Computing Application – Advances in Intelligent Systems and Computing, **Springer International Publishing**, Proceedings of 6th International Workshop on Soft Computing Applications (SOFA 2014), Volume 1, eBook ISBN 978-3-319-18296-4, ISBN 978-3-319-27178-1, DOI 10.1007/978-3-319-27179-8, pag. 27-36, Publicata in 2015
<http://www.springer.com/gp/book/9783319182957>

12. **D. Bucerzan**, C. Rațiu , “ *Contributions to Steganographic Techniques on Mobile Devices*“ Innovative Security Solutions for Information Technology and Communications , **Springer International Publishing**, Volume 9522 of the series Lecture Notes in Computer Science, pag. 242-252, eBook ISBN, 978-3-319-27179-8, ISBN 978-3-319-27178-1, DOI 10.1007/978-3-319-27179, pag.242-253, Publicata in 2015
http://link.springer.com/chapter/10.1007/978-3-319-27179-8_17
13. C. Rațiu, **D. Bucerzan**, M.J. Manolescu, “*SmartSteg: A New Android Based Steganography Application*“ E-ISSN 1841-9844, Vol. 8(5):p. 681-688, Publicata in 2013
WOS:000324844700004 , Factor de impact **IF=0.694**
14. M. Crăciun, C. Rațiu, **D. Bucerzan**, A. Manolescu “*Actuality of Bankruptcy Prediction Models Used in Decision Support System*”
International Journal of Computers Communication & Control, ISSN 1841-9836, E-ISSN 1841-9844, Vol. 8(3), pag. 375-383, Publicata in 2013
WOS:000319952400003, Factor de impact **IF=0,694**
DOI: <http://dx.doi.org/10.15837/ijccc.2013.3.464>
<http://univagora.ro/jour/index.php/ijccc/article/view/464>
15. C. Rațiu, **D. Bucerzan**, M. Crăciun, “*Analysis of Bankruptcy Prediction Model in the Present Economic Situation*”
Soft Computing Applications, **Springer Berlin Heidelberg**, Proceedings of the 5th International Workshop Soft Computing Applications, On line ISBN 978-3-642-33941-7, ISBN 978-3-642-33940-0, DOI 10.1007/978-3-642-33941-7_55, pag. 625-635, n 2013
WOS:000314077300055
http://link.springer.com/chapter/10.1007/978-3-642-33941-7_55
16. C. Rațiu, **D. Bucerzan**, M. Crăciun, “*Contribution to Watermarking Techniques*”
Soft Computing Applications, **Springer Berlin Heidelberg**, Proceedings of the 5th International Workshop Soft Computing Applications, On line ISBN 978-3-642-33941-7, ISBN 978-3-642-33940-0, DOI 10.1007/978-3-642-33941-7_37, pag. 403-410, 2013
WOS:000314077300037
http://link.springer.com/chapter/10.1007/978-3-642-33941-7_37
17. **D. Bucerzan**, M. Crăciun, V. Chiș, C. Rațiu, “*Stream Ciphers Analysis Methods*”, *International Journal of Computers Communications & Control*, ISSN 1841-9836, E-ISSN 1841-9844, Vol. 5(4):pag. 483-489, 2010, **Factor de impact IF=0,65**
WOS:000314077300055
http://www.dzitac.ro/files/ioan/IJCCC_contents_2006_2011.pdf
18. **D. Bucerzan**, “*A cryptographic algorithm based on a pseudorandom number generator*”, 10th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Published by **IEEE Computer Society**, ISBN: 978-0-7695-3523-4, DOI: 10.1109/SYNASC.2008.45, pag.453-456, 2009
WOS:000274363300074
<http://doi.ieeecomputersociety.org/10.1109/SYNASC.2008.45>

b. Articole științifice publicate în reviste de specialitate cotate CNCSIS categoria B+ și cotate în baze de date internaționale BDI

1. C. Rațiu, **Dominic Bucerzan** “*Steganography and Cryptography on Mobile Platforms*”
Constanta Maritime University Annals, Vol.20, 2013, ISSN 1582-3601
Revista de categoria B+, indexata BDI
2. **Dominic Bucerzan**, Crina Rațiu, “*Security Aspects in the e-banking System*”
Constanta Maritime University Annals, 2009, Vol.12, pp. 355-360, ISSN 1582-3601
Revista de categoria B+, indexata BDI
3. **Dominic Bucerzan**, Crina Ratiu, Ioan Dascal, “*Aspects of a Watermark Solution*”, *Revista Informatica Economică*, vol. 14, no. 4/2010, pag. 132-138, ISSN 1453-1305
Revista de categoria B+, indexata BDI
http://revistaie.ase.ro/author_details.aspx?aid=5679
4. Craciun Mihaela Daciana, **Dominic Bucerzan**, Ratiu Crina, “*Prediction Analysis of Bankruptcy Risk using Bayesian Networks*”,
Constanta Maritime University Annals, Vol.14, 2010, pag. 157-162, ISSN 1582-3601
Revista de categoria B+, indexata BDI
5. Ratiu Crina, **Dominic Bucerzan**, Craciun Mihaela Daciana, “*Statistical Model of the People Confidence in E-Business Services*”
Constanta Maritime University Annals, Vol.14. 2010, pag. 237-240, ISSN 1582-3601
Revista de categoria B+, indexata BDI
6. **Dominic Bucerzan**, Marius Gheorghita, „*HENKOS Encrytion System (HKS)*”,
Revista Informatica Economică , vol.. 8, no. 3(31)/2004, pag. 138-144, ISSN 1453-1305
Revista de categoria B+, indexata BDI
<http://revistaie.ase.ro/content/31/bucerzan.pdf>

c. Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate

1. Bejan, Crina Anina, **Dominic Bucerzan**, and Mihaela Daciana Craciun. "Perspectives of Cryptocurrency Price Prediction." *Education, Research and Business Technologies: Proceedings of 21st International Conference on Informatics in Economy (IE 2022)*. Vol. 321. Springer Nature, 2023. https://link.springer.com/chapter/10.1007/978-981-19-6755-9_27
2. Crina Anina Bejan, **Dominic Bucerzan**, ”Challenges of Securing Digital Information”, *Proceeding of the 17th International Conference on Informatics in Economy (ISSN: 2247 – 1480)*, Education, Research & Business Technologies, pag. 337-342, 2018

3. **Dominic Bucerzan**, Crina Anina Bejan, „Current Threats of Digital Information Technologies”, Proceedings of The International Symposium Research and Education in Innovation Era Arad, 7th Edition, ISREIE 2018, Mathematics&Computer Science ISSN 2065 2569, pag. 6-11, 2018
4. Vlad Dragoi, Tania Richmond, **Dominic Bucerzan** and Axel Legay , „Survey on Cryptanalysis of Code-Based Cryptography : From Theoretical to Physical Attacks”, IEEE Internațional Conference on Computers Communications and Control, Baile Felix, Oradea, Romania, May 2018. <http://dx.doi.org/10.1109/ICCCC.2018.8390461>
5. Crina Anina Bejan, **Dominic Bucerzan**, „On Image Steganography Metrics for Mobile Platforms”, Proceedings of the 16th International Conference on INFORMATICS in ECONOMY (IE 2017), May 2017, pag 122-127, Education, Research & Business Technologies, Published by Bucharest University of Economic Studies Press, ISSN 2284-7472,
6. C. Rațiu, D. Bucerzan, “*Secure E-Business Solution for Mobile Platform*“ Proceedings of the 15th International Conference on INFORMATICS in ECONOMY (IE 2016) Education, Research & Business Technologies, Bucharest University of Economic Studies Press, Cluj-Napoca, Romania, pag.51-57, 2016, ISSN: 2284-7472, ISSN-L: 2247-1480
7. **Bucerzan D.**, Rațiu C., “*Testing Methods for the Efficiency of Modern Steganography Solutions for Mobile Platforms*“, 2016 6th International Conference on Computers Communications and Control (ICCCC), Publisher IEEE, 10-14 Mai 2016, Oradea, România, ISBN: 978-1-5090-1735-5, DOI: 10.1109/ICCCC.2016.7496734, <http://ieeexplore.ieee.org/abstract/document/7496734/>
8. **Bucerzan D.**, Rațiu C., “*Reliable Metrics for Image LSB Steganography on Mobile Platforms*“, Proceedings of the 7th International Workshop on Soft Computing Applications SOFA 2016, 24-26 August, Arad, Romania, Advances in Intelligent Systems and Computing (ISSN: 2194-5357), Springer, 2016
9. Stoian C.D., **Bucerzan D.**, “*Information System Security in the Context of Administrative Cooperation through Internal Market Information System in Romania*“, Proceedings of the 7th International Workshop on Soft Computing Applications SOFA 2016, 24-26 August, Arad, Romania, Advances in Intelligent Systems and Computing (ISSN: 2194-5357), Springer, 2016
10. Iovanov V., Buzgau M., **Bucerzan D.**, “*Containerizing Solution for a Highly Distributed Systems*“, Proceedings of the 7th International Workshop on Soft Computing Applications SOFA 2016, 24-26 August, Arad, Romania, Advances in Intelligent Systems and Computing (ISSN: 2194-5357), Springer, 2016
11. **Bucerzan D.**, Stoian C.D., “*Security of information sent through RNNEC*“, Proceedings of the International Symposium Research and Education in an Innovation ERA - 6rd Edition, Arad, decembrie 2016, pag. 112-116, ISSN 2065 2469

12. **Bucerzan D.**, Dragoi V., “*Code-Based Cryptography as a Post Quantum Cryptography Alternative*“, Proceedings of the International Symposium Research and Education in an Innovation ERA - 6rd Edition, Arad, decembrie 2016, pag. 106-112, ISSN 2065 2469
13. **D. Bucerzan**, C. Rațiu , „*Contributions to Steganographic Techniques on Mobile Devices*” Innovative Security Solutions for Information Technology and Communications , 8th International Conference, SECITC 2015, Bucharest, Romania, June 11-12, 2015. Revised Selected Papers, pag. 242-252, eBook ISBN 978-3-319-27179-8, ISBN 978-3-319-27178-1
14. **Dominic Bucerzan**, Crina Rațiu, „*Secret Communication using Cryptography and Steganography*” Proceedings of the International Symposium Research and Education in an Innovation ERA - 5rd Edition, Arad, **Noiembrie 2014**, pag, 14-20, ISSN 2065 2569 <http://www.rxiv.org/pdf/1412.0034v1.pdf>
15. **D. Bucerzan**, C. Rațiu, „*Image Processing with Android Steganography*” presented at „6th International Workshop on Soft Computing Applications”, SOFA 2014, Organized by **IEEE Romania**, 24-26 iulie, Timisoara, Romania, published by Springer, Advances in Intelligent Systems and Computing, Springer, Advances in Intelligent and Soft Computing, Soft Computing Applications, ISSN: 2194-5357, e-ISSN 2194-5365 <http://www.springer.com/gp/book/9783319182957>
16. **D. Bucerzan**, C. Rațiu, „ *Binding Android Steganography by Windows Steganography* ” 5th International Conference on Computers, Communication & Control (ICCCC 2014), May 6-10, 2014, Oradea- Baile Felix, ISSN 1844-4334, 4(2014)
17. C. Rațiu, **D. Bucerzan**, M. Crăciun, „*Analysis of Bankruptcy Prediction Model in the Present Economic Situation*” presented at „5th International Workshop on Soft Computing Applications”, SOFA 2012, Organized by **IEEE Computational Intelligence Society**, August 2012, Szeged, Hungary, published by Springer, Advances in Intelligent and Soft Computing, Soft Computing Applications, ISSN: 2194-5357, e-ISSN 2194-5365 http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=21025
18. C. Rațiu, **D. Bucerzan**, M. Crăciun, „*Contribution to Watermarking Techniques*” presented at „5th International Workshop on Soft Computing Applications”, SOFA 2012, Organized by **IEEE Computational Intelligence Society**, August 2012, Szeged, Hungary, published by Springer, Advances in Intelligent and Soft Computing, Soft Computing Applications, ISSN: 2194-5357, e-ISSN 2194-5365 http://www.ieee.org/conferences_events/conferences/conferencedetails/index.html?Conf_ID=21025
19. Mihaela Crăciun, **Dominic Bucerzan**, Crina Rațiu, Violeta Chiș, „*Statistical Methods and Concepts of Probability Used in Bayesian Networks*”

Proceedings of the International Symposium Research and Education in an Innovation ERA - 4rd Edition, Arad, Noiembrie 2012, pag. 47-57, ISSN 2065 2569

20. **Dominic Bucerzan**, Crina Rațiu, Mihaela Crăciun, „*Digital Steganography, Completing the Security of Digital Data*”

Proceedings of the International Symposium Research and Education in an Innovation ERA - 4rd Edition, Arad, **Noiembrie 2012**, pag. 58-66, ISSN 2065 2569

21. M. Crăciun, C. Rațiu, **D. Bucerzan**, A. Manolescu, „*On the Applicability of the Anghel and Altman Bankruptcy Prediction Models in the Actual Crisis Conditions*”

International Conference on Computers, Communication & Control (ICCCC 2012), Workshop on Intelligent Decision Support Systems for Crisis Management, May 2012, Oradea, Romania, vol. 3(2012), ISSN 1844-4334

22. Crina Rațiu, **Dominic Bucerzan**, “Attacks on the Watermark Techniques”

2nd Symposium on Business Informatics in Central and Eastern Europe 2011, Osterreichische Computer Gesellschaft, , pag. 235-245, ISBN 978-3-85403-280-9

23. Mihaela Crăciun, **Dominic Bucerzan**, Crina Rațiu, „*The Analysis of Continuous Variables in Model of Bankruptcy Risk using Bayesian Networks*”,

Proceeding of the Second International Conference “Modelling and Development of Intelligent Systems”, September 29-October 2, 2011 Sibiu, Romania, Lucian Blaga University Press, Sibiu, 2011, pag. 36-44, ISSN 2067-3965

<http://conferences.ulbsibiu.ro/mdis/2011/papers/pg36.pdf>

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