

## List of Scientific Papers

### A. PhD Thesis

#### “Bayesian Neural Network based Electrical Load Forecasting”

„Politehnica” University of Timișoara

Electrical and Power Engineering Faculty

Field: Power Engineering

Scientific coordinator: Prof. univ.dr. ing. Ștefan KILYENI

### B. BOOKS

**Mihaela-Daciana Crăciun**, Adrian Palcu – “Birotică - Manual de utilizare MS Word & MS Excel”, ISBN 978-973-52-1524-8, Editura Mirton – Timișoara 2015

### C. PUBLISHED SCIENTIFIC PAPERS

#### Scientific papers published in ISI journals and ISI Proceedings

1. 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](https://doi.org/10.1007/978-981-19-6755-9_27)
2. Crina Anina Bejan, Dominic Bucerzan, **Mihaela Daciana Crăciun**, “Bitcoin price evolution versus energy consumption; trend analysis”, Applied Economics Journal ISSN: 0003-6846, Published: Taylor & Francis Online on 13 Iulie 2022, <https://doi.org/10.1080/00036846.2022.2097194>
3. Bărbulescu C., Kilyeni Șt., Chiș V., **Crăciun M.**, Simo A., „Daily Load Curve Forecasting. Comparative Analysis: Conventional vs. Unconventional Methods”, In: Balas V., Jain L., Balas M., Shahbazova S. (eds.) Soft Computing Applications, SOFA 2018, Advances in Intelligent Systems and Computing, vol . 1221, Springer, pp.3 18 , [https://doi.org/10.1007/978-3-030-51992-6\\_1](https://doi.org/10.1007/978-3-030-51992-6_1), (în curs de indexare WoS; conferințele anterioare indexată WoS).

4. Bărbulescu C. Kilyeni Șt., Deacu A., Simo A., **Crăciun M.**, „Power Consumption Forecast Quality”, Proceedings of the 7th International Conference on Computers Communications and Control (ICCCC 2018), May 8 12, 2018, Oradea, Romania, p.103 110 , DOI: 10.1109/ICCCC.2018.8390445, WOS: 000437157500016, <https://ieeexplore.ieee.org/document/8390445>
5. **Crăciun M.**, Csorba L.M., „Application of the Fuzzy-Pay-Off Method in the Valuation of a Financial Instrument”, Soft Computing Applications. SOFA 2016. Advances in Intelligent Systems and Computing, vol 634, pp 235-250, Springer, Cham., 2018, [https://doi.org/10.1007/978-3-319-62524-9\\_19](https://doi.org/10.1007/978-3-319-62524-9_19)
6. Csorba L.M., **Crăciun M.** „An Application of the Multi Period Decision Trees in the Sustainable Medical Waste Investments”, Soft Computing Applications. SOFA 2016. Advances in Intelligent Systems and Computing, vol 634, pag.540-556, Springer, Cham., 2018, [https://doi.org/10.1007/978-3-319-62524-9\\_40](https://doi.org/10.1007/978-3-319-62524-9_40)
7. **Crăciun M.**, Bucerzan D., Rațiu C., Manolescu A., „Actuality of Bankruptcy Prediction Models used in Decision Support System”, International Journal of Computers Communications & Control, vol.8, nr.3, 2013, pp.375-383, WOS: 000319952400003, <http://univagora.ro/jour/index.php/ijccc/article/view/464>
8. C. Rațiu, D. Bucerzan, **M. Crăciun**, „Analysis of the Bankruptcy Prediction Model in the Present Economic Situation”, Soft Computing Applications. Advances in Intelligent Systems and Computing, vol 195, pp 625-635, Springer, Berlin, Heidelberg, 2013, WOS:000314077300055, [https://doi.org/10.1007/978-3-642-33941-7\\_55](https://doi.org/10.1007/978-3-642-33941-7_55)
9. C. Rațiu, D. Bucerzan, **M. Crăciun**, „Contribution to Watermarking Techniques”, Soft Computing Applications. Advances in Intelligent Systems and Computing, vol 195, pp 403-410, Springer, Berlin, Heidelberg, 2013, WOS:000314077300037, [https://doi.org/10.1007/978-3-642-33941-7\\_37](https://doi.org/10.1007/978-3-642-33941-7_37)
10. Bucerzan D., **Crăciun M.**, Chis V., Rațiu C., „Stream Ciphers Analysis Methods”, International Journal of Computers Communications & Control, vol.5, nr.4, 2010, pp.483 489 WOS: 000282600700007, <http://univagora.ro/jour/index.php/ijccc/article/view/2506>

**Scientific papers published in journals listed in international databases BDI and journals listed CNCIS with B + category**

1. **Crăciun M.**, Kilyeni St., Bărbulescu C., Meszaros R.G., „Bayesian Network Applications in Power Systems Engineering. A Review”, Journal of Sustainable Energy Vol. 8, No. 3, ISSN 2067-5534, pag.99-105, Septembrie 2017,  
[http://www.energy-cie.ro/archives/2017/nr\\_3/v8-n3-5.pdf](http://www.energy-cie.ro/archives/2017/nr_3/v8-n3-5.pdf), (EBSCO)
2. D. Manațe, **M. Crăciun**, E. Horváth-Balta, I. Horváth-Balta, „A Literature Review Fuzzy Pay-Off-Method – A Modern Approach in Valuation”, Journal of Economics and Business Research - ISSN: 2068 - 3537, E – ISSN (online) 2069 – 9476, ISSN – L = 2068 – 3537, Year XXI, No. 1, 2015, pp. 98-107,  
<https://www.uav.ro/jour/index.php/jebr/article/view/437>
3. **Mihaela-Daciana Crăciun**, Violeta Chis, Cristina Băla, „Methods for Discretizing Continuous Variables within the Framework of Bayesian Networks”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 433-443, [http://auajournal.uab.ro/upload/56\\_389\\_Paper32-Ictami2011.pdf](http://auajournal.uab.ro/upload/56_389_Paper32-Ictami2011.pdf)
4. Violeta Chiș, Cristina Băla, **Mihaela-Daciana Crăciun**, „Simulation of Lightning Overvoltages with ATP-EMTP and PSCAD/EMTDC”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 453-460, [http://auajournal.uab.ro/upload/56\\_391\\_Paper34-Ictami2011.pdf](http://auajournal.uab.ro/upload/56_391_Paper34-Ictami2011.pdf)
5. Cristina Băla, Violeta Chis, **Mihaela-Daciana Crăciun**, „The Use of Databases in the Assessment of Power Transformers”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 445-452, [http://auajournal.uab.ro/upload/56\\_390\\_Paper33-Ictami2011.pdf](http://auajournal.uab.ro/upload/56_390_Paper33-Ictami2011.pdf)
6. C. Băla, V. Chiș, **M.D. Crăciun** “Considerations on the management of preventive maintenance to electrical transformers”, Annals of the Oradea University., Fascicle of Management and Technological Engineering, Volume X (XX), 2011, NR1, pag.5-8, B+,  
<https://imt.uoradea.ro/auo.fmte/files-2011-v1/MANAGEMENT/Bala%20%20Cristina%20L.pdf>
7. **Mihaela-Daciana Crăciun**, Dominic Bucerzan, Crina Rațiu, „Prediction Analysis of Bankruptcy using Bayesian Networks”, Constanta Maritime University Annals, Year XI, Vol.14, 157-162, ISSN: 1582-3601, B+, indexată BDI, Decembrie 2010

8. Crina Rațiu, **Mihaela-Daciana Crăciun**, Dominic Bucerzan, „Statistical Model of the Confidence in e-Business Services”, Constanta Maritime University Annals, Year XI, Vol.14, 237-240, ISSN: 1582-3601, B+, indexată BDI ,Decembrie 2010
9. **Mihaela-Daciana Crăciun**, „Credit Risk Management Software Analysis”, Constanta Maritime University Annals, Year X, Vol.12, 365-370, ISSN: 1582-3601, B+, Septembrie 2009

#### D. SCIENTIFIC PAPERS PUBLISHED IN EXTENSO IN THE PROCEEDINGS OF INTERNATIONAL CONFERENCES

1. Crina Anina Bejan, Dominic Bucerzan, **Mihaela Daciana Crăciun**, “Perspectives of Cryptocurrency Price Prediction” - The 21<sup>st</sup> International Conference on Informatics in Economy (IE 2022), 26 May Bucharest - Romania
2. **Craciun Mihaela**, Chis Violeta, Craciun Alexandru „Bayesian Network using R” - International Symposium Research and Education in an Innovation ERA - 8<sup>rd</sup> Edition, May 2019
3. Chis Violeta, Ampwera Brian, **Craciun Mihaela**, „Text Mining Using R” - International Symposium Research and Education in an Innovation ERA - 8<sup>rd</sup> Edition, May 2019
4. Constantin Barbulescu, Stefan Kilyeni, Violeta Chis, **Mihaela Craciun** and Attila Simo „Daily Load Curve Forecasting. Comparative Analysis: Conventional vs. Unconventional Methods”, 8<sup>th</sup> International Workshop on Soft Computing Applications, September 2018 – Hotel Continental Arad – Romania
5. Barbulescu, C; Kilyeni, S; Deacu, A; Simo, A; **Craciun, M** „Power Consumption Forecast Quality Assessment”, IEEE Proceedings ISBN 978-1-5386-1934-6, ICCCC2018 - 7<sup>th</sup> International Conference on Computers Communications and Control, pag. 103-110 Published: 2018, WOS:000437157500016, DOI 10.1109/ICCC.2018.8390445
6. **Craciun M.**, Chis V., Craciun A. „Approaching Bayesian Networks with BayesiaLab” - Proceedings ISREIE - 7rd Edition, May 2018 – Mathematics & Computer Science, ISSN – 2065 2569, Vol.7/1, pag.67-75
7. Violeta Chis, **Mihaela D. Craciun**, Tania B. Gavrilă „PSCAD/EMTDC Simulation of Custom Power Systems”, Proceedings ISREIE - 7rd Edition, May 2018 – Mathematics & Computer Science, ISSN – 2065 2569, Vol.7/1, pag.61-66
8. **CRACIUN M.**, KILYENI ST., BARBULESCU C., NICOLAE R.C. „*Bayesian Network Applications in Power Systems Engineering. A Review*” – C.I.E. 2017 – Energie curată și accesibilă, 8-9 iunie 2017 – Universitatea din Oradea – Oradea - Romania
9. **M. Crăciun**, V. Chiș „*Comparative statistical analysis of valuation for tax purposes*” - Proceedings of the International Symposium Research and Education in an Innovation ERA - 6<sup>rd</sup> Edition, ISBN 2065 2569, 115-122, Decembrie 2016
10. V. Chiș, **M. Crăciun** „*Artificial intelligence techniques in power systems*” - Proceedings of the International Symposium Research and Education in an Innovation ERA - 6<sup>rd</sup> Edition, ISBN 2065 2569, 110-114, Decembrie 2016

11. **M. Crăciun**, L.Csorba „Application of the Fuzzy-Pay-Off Method in the Valuation of a Financial Instrument” – 7<sup>th</sup> International Workshop on Soft Computing Applications, August 2016 – Hotel Continental Arad – Romania
12. L.Csorba, **M. Crăciun** „An Application of the Multi Period Decision Trees in the Sustainable Medical Waste Investments” – 7<sup>th</sup> International Workshop on Soft Computing Applications, August 2016 – Hotel Continental Arad – Romania
13. C. Rațiu, D. Bucerzan, **M. Crăciun** „Analysis of Bankruptcy Prediction Model in the Present Economic Situation” presented at „5<sup>th</sup> 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
14. C. Rațiu, D. Bucerzan, **M. Crăciun** „Contribution to Watermarking Techniques” presented at „5<sup>th</sup> 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
15. **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 - 4<sup>rd</sup> Edition, ISBN 2065 2569, 47-57, Noiembrie 2012
16. 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 - 4<sup>rd</sup> Edition, ISBN 2065 2569, 58-66, Noiembrie 2012
17. Violeta Chiș, Cristina Băla, **Mihaela Daciana Crăciun**, „*Using PSCAD to Find the Maximum Overvoltage on a Bus for Different Fault Types Applied at Different Times*” - Proceedings of the International Symposium Research and Education in an Innovation ERA - 4<sup>rd</sup> Edition, ISBN 2065 2569, 75-83, Noiembrie 2012
18. **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 (ICCC 2012), Workshop on Intelligent Decision Support Systems for Crisis Management, May 2012, Oradea, Romania, vol. 3(2012), ISSN 1844-4334

19. V. Chiş, **M. Crăciun**, C. Băla, „Comparison of two Program Packages for Switching Overvoltages Simulation”, Proceedings of International Conference on Innovative Technologies, IN-TECH 2011 BRATISLAVA, ISBN 978-80-904502-6-4, pag 207-210
20. **Mihaela-Daciana Crăciun**, Violeta Chis, Cristina Băla, „Methods for Discretizing Continuous Variables within the Framework of Bayesian Networks”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 433-443
21. Violeta Chiş, Cristina Băla, **Mihaela-Daciana Crăciun**, „Simulation of Lightning Overvoltages with ATP-EMTP and PSCAD/EMTDC”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 453-460
22. Cristina Băla, Violeta Chis, **Mihaela-Daciana Crăciun**, „The Use of Databases in the Assessment of Power Transformers”, Proceedings of the International Conference on Theory and Applications in Mathematics and Informatics, ICTAMI 2011 Alba-Iulia, Aeternitas Publishing House, Alba Iulia July 2011, ISSN 1582-5329, pag 445-452
23. **Mihaela Crăciun**, Dominic Bucerzan, Crina Raţiu, „The Analysis of Continuous Variables in the Decision 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, ISSN 2067-3965, pag. 36-44
24. Crina Raţiu, Dominic Bucerzan, **Mihaela Crăciun**, „About Hash Function and Watermark Algorithms”, 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, ISSN 2067-3965, pag.138-145.
25. D. Bucerzan, **M. Crăciun**, V. Chis, C. Raţiu, „Analysis Methods for Stream Cipher in Cryptography ” International Conference on Computers, Communication & Control (ICCCC 2010), May 2010, Oradea, vol. 2(2010), ISSN 1844-4334
26. **Mihaela-Daciana Crăciun**, Dominic Bucerzan, Crina Raţiu, „Comparison between Predicting Models of Bankruptcy Risk”, Proceedings of the International Symposium Research and Education in an Innovation ERA - 3<sup>rd</sup> Edition, ISSN 2065 2569, 31-37, Noiembrie 2010
27. Crina Raţiu, Dominic Bucerzan, **Mihaela-Daciana Crăciun**, „Solution for Ensuring Data Autenticity by Using Digital Watermarking”, Proceedings of the International Symposium Research and Education in an Innovation ERA - 3<sup>rd</sup> Edition, ISSN 2065 2569, 57-65, Noiembrie 2010

28. **Mihaela-Daciana Crăciun**, „Risk Management Software”, Proceedings of the International Symposium Research and Education in an Innovation ERA - 2<sup>nd</sup> Edition, ISSN 2065 2569, 174-183, Noiembrie 2008

#### **E. OTHER SCIENTIFIC PAPERS**

1. **Mihaela-Daciana Crăciun**, „A Fuzzy Decision Marker” - Bulletins for Applied & Computer Mathematics, 121-128, ISSN: 0133-3526, Octombrie 2007
2. **Crăciun M.**, Scientific Report no.1 with intermediate research results, „Politehnica” University of Timișoara, Electrical and Power Engineering Faculty, Department of Electroenergetics, Timișoara, 2018
3. **Crăciun M.** - Scientific Report no.2 with intermediate research results, „Politehnica” University of Timișoara, Electrical and Power Engineering Faculty, Department of Electroenergetics, Timișoara, 2019

#### **F. PROJECTS OBTAINED ON THE BASIS OF INTERNATIONAL AND NATIONAL COMPETITIONS**

##### *INTERNATIONAL COMPETITIONS*

1. Member (target group database management) in the project team: "Developing a consulting network for Romanian-Hungarian firms - *TAMARO*", research project number: HURO/0801/058/2009, project financed by the Romania-Hungary Cross-Border Cooperation Fund, value 74.056 euro

##### *NATIONAL COMPETITIONS*

1. Contract member in UPT 21/2017, Elaboration of calculation models and their application for forecasting own technological consumption in electricity distribution networks, Electrica Muntenia Nord & Servelect;
2. Member of the Central Commission and member of the Subjects Commission of the International Mathematics and Computer Science Competition "Caius Iacob" - 9th Edition (April 2017).
3. Contract member in UPT 59 /2018 , Analysis and optimization of operating regimes for the electricity distribution network, Electrica Muntenia Nord & Servelect



4. Member of the Central Commission and member of the Subjects Commission of the International Mathematics and Computer Science Contest "Caius Iacob" - 10th Edition (April 2018)
5. Member of the Organizing Committee of the International Student Conference StudMath-IT, Edition 15-16 November 2018
6. Contract member in UPT 63/2019, Analysis of operating regimes for post calculation determination of own technological consumption, Electrica Muntenia Nord & Servelect
7. Member of the Central Commission and member of the Subjects Commission of the International Mathematics and Computer Science Competition "Caius Iacob" - XIth Edition (May 2019)
8. Member of the Organizing Committee of the International Student Conference StudMath-IT, Edition 21-22 November 2019
9. Contract member in UPT 14 /2020 , Forecasting of own technological consumption in electricity distribution networks, DelGaz Grid Moldova & Servelect
10. Contract member in UPT 75/2020, Evaluation of own technological consumption by post calculation methods in distribution networks, Electrica Muntenia Nord & Servelect
11. Member in project obtained on the basis of the national competition "International Students' Conference StudMath-IT organized by Faculty of Exact Sciences, "Aurel Vlaicu" University of Arad - Nov.2021", project type MEN, value 9.700 lei
12. Member of the Central Commission and member of the Subjects Commission of the International Mathematics and Computer Science Competition "Caius Iacob" - XIIIth Edition (May 2023)
13. Member of the Organizing Committee of the International Student Conference StudMath-IT, Edition 23-24 November 2022

Arad, 10.09.2023

Mihaela-Daciana Crăciun

