

Árpád GELLÉRT – Lista lucrărilor publicate

1. Darius Peteleaza, Alexandru Matei, Radu Sorostinean, **Arpad Gellert**, Ugo Fiore, Balázs-Constantin Zamfirescu, Francesco Palmieri, *Electricity consumption forecasting for sustainable smart cities using machine learning methods*, Internet of Things, Vol. 27, ISSN 2543-1536 (ISI IF=6.0, Scopus), DOI 10.1016/j.iot.2024.101322, p. 101322, October 2024.
2. Claudiu Buduleci, **Arpad Gellert**, Adrian Florea, Remus Brad, *Improving Multicore Architectures by Selective Value Prediction of High-Latency Arithmetic Instructions*, Advances in Electrical and Computer Engineering, Vol. 24, No. 2, ISSN 1582-7445 (ISI IF=0.7, Scopus), DOI 10.4316/AECE.2024.02007, pp. 61-72, May 2024.
3. Radu Sorostinean, Zaharia Burghelea, **Arpad Gellert**, *Anomaly Detection in Smart Industrial Machinery Through Hidden Markov Models and Autoencoders*, IEEE Access, Vol. 12, ISSN 2169-3536 (ISI IF=3.9, Scopus, DBLP), DOI 10.1109/ACCESS.2024.3400970, pp. 69217-69228, May 2024.
4. Claudiu Buduleci, **Arpad Gellert**, Adrian Florea, Remus Brad, *Architectural and Technological Approaches for Efficient Energy Management in Multicore Processors*, Computers, Vol. 13, Issue 4, ISSN 2073-431X (ISI IF=2.8, Scopus, DBLP), DOI 10.3390/computers13040084, p. 84, March 2024.
5. **Arpad Gellert**, Lorena-Maria Olaru, Adrian Florea, Ileana-Ioana Cofaru, Ugo Fiore, Francesco Palmieri, *Estimating electricity consumption at city-level through advanced machine learning methods*, Connection Science, Vol. 36, No. 1, ISSN 0954-0091 (ISI IF=5.3, Scopus, DBLP), DOI 10.1080/09540091.2024.2313852, p. 2313852, January 2024.
6. Teodor-Adrian Radescu, **Arpad Gellert**, *Fog Detection through Image Processing Methods*, International Journal of Advanced Statistics and IT&C for Economics and Life Sciences, Vol. 13, Issue 1, ISSN 2559-365X (indexed PKP, ROAD, SCIENDO, EBSCO), DOI 10.2478/ijasitels-2023-0004, pp. 28-37, December 2023.
7. Claudiu-Raul Buduleci, **Arpad Gellert**, Adrian Florea, *Selective High-Latency Arithmetic Instruction Reuse in Multicore Processors*, The 27th International Conference on System Theory, Control and Computing (ICSTCC), ISBN 979-8-3503-3798-3 (indexed DBLP, Scopus), Timisoara, October 2023.
8. Stefan-Alexandru Precup, Snehal Walunj, **Arpad Gellert**, Christiane Plociennik, Jibinraj Antony, Constantin-Bala Zamfirescu, Martin Ruskowski, *Recognising Worker Intentions by Assembly Step Prediction*, 28th International Conference on Emerging Technologies and Factory Automation (ETFA), ISBN 979-8-3503-3990-1 (indexed Scopus, DBLP), Sinaia, September 2023.
9. Stefan-Alexandru Precup, Alexandru Matei, Snehal Walunj, **Arpad Gellert**, Christiane Plociennik, Constantin-Bala Zamfirescu, *Collaborative exploitation of various AI methods in adaptive assembly assistance systems*, Procedia Computer Science, Elsevier, Vol. 221, ISSN 1877-0509 (indexed Scopus), pp. 1170-1177, August 2023.
10. Alexandru Matei, Stefan-Alexandru Precup, Dragos Circa, **Arpad Gellert**, Constantin-Bala Zamfirescu, *Estimating Travel Time for Autonomous Mobile Robots through Long Short-Term Memory*, Mathematics, Vol. 11, Issue 7, ISSN 2227-7390 (ISI IF=2.592, Scopus), DOI 10.3390/math11071723, p. 1723, April 2023.

11. Árpád Gellért, *Prediction-Based Modeling and Estimation in Advanced Computing Systems*, Habilitation Thesis, "Lucian Blaga" University of Sibiu, March 2023.
12. Lorena M. Olaru, Arpad Gellert, Ugo Fiore, Francesco Palmieri, *Electricity Production and Consumption Modeling through Fuzzy Logic*, International Journal of Intelligent Systems, Vol. 37, Issue 11, ISSN 0884-8173 (ISI IF=8.993, DBLP, Scopus), DOI 10.1002/int.22942, pp. 8348-8364, November 2022.
13. Arpad Gellert, Stefan-Alexandru Precup, Alexandru Matei, Bogdan-Constantin Pirvu, Constantin-Bala Zamfirescu, *Real-Time Assembly Support System with Hidden Markov Model and Hybrid Extensions*, Mathematics, Vol. 10, Issue 15, ISSN 2227-7390 (ISI IF=2.592, Scopus), DOI 10.3390/math10152725, p. 2725, August 2022.
14. Arpad Gellert, Darius Sarbu, Stefan-Alexandru Precup, Alexandru Matei, Dragos Circa, Constantin-Bala Zamfirescu, *Estimation of Missing LiDAR Data for Accurate AGV Localization*, IEEE Access, Vol. 10, ISSN 2169-3536 (ISI IF=3.367, DBLP, Scopus), DOI 10.1109/ACCESS.2022.3185763, pp. 68416-68428, June 2022.
15. Claudiu Buduleci, Arpad Gellert, Adrian Florea, Alexandru Matei, *Extending Sniper with Support to Access Operand Values: A Case Study on Reusability Measurement*, 23rd International Carpathian Control Conference, ISBN 978-1-6654-6636-3 (indexed ISI, Scopus), pp. 70-75, Sinaia, May 2022.
16. Stefan-Alexandru Precup, Arpad Gellert, Alexandru Matei, Maria Gita, Constantin-Bala Zamfirescu, *Towards an Assembly Support System with Dynamic Bayesian Network*, Applied Sciences, Vol. 12, Issue 3, ISSN 2076-3417 (ISI IF=2.474, Scopus), DOI 10.3390/app12030985, p. 985, Switzerland, February 2022.
17. Arpad Gellert, Radu Sorostinean, Bogdan-Constantin Pirvu, *Robust Assembly Assistance Using Informed Tree Search with Markov Chains*, Sensors, Vol. 22, Issue 2, ISSN 1424-8220 (ISI IF=3.275, Scopus, DBLP), DOI 10.3390/s22020495, p. 495, January 2022.
18. Arpad Gellert, Ugo Fiore, Adrian Florea, Radu Chis, Francesco Palmieri, *Forecasting Electricity Consumption and Production in Smart Homes through Statistical Methods*, Sustainable Cities and Society, Vol. 76, ISSN 2210-6707 (ISI IF=7.587, Scopus), January 2022.
19. Constantin-Bălă Zamfirescu (coordonator), Alexandru Matei (editor), Vasile-Alexandru Butean, Dragoș Circa, Alin Marius Crucean, Arpad Gellert, Teodor Ghețiu, Valentin Cătălin Govoreanu, Mihai Neghină, Răzvan Gabriel Pămărac, Radu Emanuil Petruș, Bogdan-Constantin Pîrvu, Livia Dana Pogan, Radu Ioan Popa, Ștefan Alexandru Precup, Samuel Pușcașu, Sergiu Gabriel Stanciu, Radu Traian Șoroștinean, Nicolae-Adrian Țocu, Radu-Alexandru Voju, *Ingineria sistemelor socio-fizico-cibernetice în sisteme de producție*, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1848-6, 2021.
20. Constantin-Bălă Zamfirescu (coordonator), Vasile-Alexandru Butean, Dragoș Circa, Alin Marius Crucean, Arpad Gellert, Teodor Ghețiu, Valentin Cătălin Govoreanu, Alexandru Matei, Mihai Neghină, Bogdan-Constantin Pîrvu, Ștefan Alexandru Precup, Samuel Pușcașu, Nicolae-Adrian Țocu, Radu-Alexandru Voju, *Studii de analiză a arhitecturilor, metodelor și tehniciilor de implementare a celei de-a patra revoluții tehnologice*, Editura Universității „Lucian Blaga” din Sibiu, ISBN 978-606-12-1847-9, 2021.
21. Arpad Gellert, Remus Brad, Daniel Morariu, Mihai Neghina, *Filtering Random Valued Impulse Noise from Grayscale Images through Support Vector Machine and Markov Chain*, International Journal of Advanced Statistics and IT&C for Economics and Life Sciences,

Vol. 11, Issue 1, ISSN 2559-365X (indexed PKP, ROAD, SCIENDO, EBSCO), DOI 10.2478/ijasitels-2021-0004, pp. 70-84, December 2021.

22. Alexandru Matei, Nicolae-Adrian Tocu, Constantin-Bala Zamfirescu, **Arpad Gellert**, Mihai Neghina, *Engineering a Digital Twin for Manual Assembling*, Leveraging Applications of Formal Methods, Verification and Validation: Tools and Trends, ISoLA 2020, Lecture Notes in Computer Science, Vol. 12479, ISBN 978-3-030-83722-8, pp. 140-152, Springer, Cham, 2021.
23. **Arpad Gellert**, *Web Usage Mining by Neural Hybrid Prediction with Markov Chain Components*, Journal of Web Engineering, River Publishers, Vol. 20, Issue 5, ISSN 1540-9589 (ISI IF= 0.396, DBLP), pp. 1279-1296, Denmark, July 2021.
24. Radu Sorostinean, **Arpad Gellert**, Bogdan-Constantin Pirvu, *Assembly Assistance System with Decision Trees and Ensemble Learning*, Sensors, Vol. 21, Issue 11, ISSN 1424-8220 (ISI IF=3.275, Scopus, DBLP), DOI 10.3390/s21113580, p. 3580, May 2021.
25. Stefan-Alexandru Precup, **Arpad Gellert**, Alexandru Dorobantu, Constantin-Bala Zamfirescu, *Assembly Process Modeling Through Long Short-Term Memory*, 13th Asian Conference on Intelligent Information and Database Systems, ISSN 1865-0929 (indexed DBLP), pp. 28-39, Phuket, Thailand, April 2021.
26. **Arpad Gellert**, Stefan-Alexandru Precup, Bogdan-Constantin Pirvu, Ugo Fiore, Constantin-Bala Zamfirescu, Francesco Palmieri, An Empirical Evaluation of Prediction by Partial Matching in Assembly Assistance Systems, Applied Sciences, Vol. 11, Issue 7, ISSN 2076-3417 (ISI IF=2.474, Scopus), DOI 10.3390/app11073278, p. 3278, April 2021.
27. Miroslav-Andrei Bachici, **Arpad Gellert**, *Modeling Electricity Consumption and Production in Smart Homes using LSTM Networks*, International Journal of Advanced Statistics and IT&C for Economics and Life Sciences, Vol. X, No. 1, ISSN 2559-365X (indexed PKP, ROAD, SCIENDO), DOI 10.2478/ijasitels-2020-0009, pp. 80-90, December 2020.
28. **Arpad Gellert**, Remus Brad, *Image Inpainting with Markov Chains*, Signal, Image and Video Processing, Vol. 14, Issue 7, ISSN 1863-1703 (ISI IF=1.794, Scopus, DBLP), DOI 10.1007/s11760-020-01675-7, pages 1335-1343, October 2020.
29. **Arpad Gellert**, Stefan-Alexandru Precup, Bogdan-Constantin Pirvu, Constantin-Bala Zamfirescu, *Prediction-Based Assembly Assistance System*, 25th International Conference on Emerging Technologies and Factory Automation (ETFA), ISBN 978-1-7281-8957-4, pages 1065-1068, Vienna, Austria, September 2020.
30. **Arpad Gellert**, Constantin-Bala Zamfirescu, *Assembly support systems with Markov predictors*, Journal of Decision Systems, ISSN 1246-0125 (indexed ISI, Scopus), DOI: 10.1080/12460125.2020.1788798, First online: July 2020.
31. Claudiu Buduleci, **Árpád Gellért**, Adrian Florea, Radu Chiș, Remus Brad, *Multi-Objective Optimization of Speculative and Anticipative Multi-Core Architectures*, Advanced Computer Architecture and Compilation for High-performance Embedded Systems, ISBN 9789078427001, pages 11-14, Fiuggi, Italy, July 2020.
32. Nicolae-Adrian Tocu, **Arpad Gellert**, Ioana-Ramona Stefan, Teodor-Marian Nitescu, Gabriela-Alexandra Luca, *The impact of virtual reality simulators in manufacturing industry*, 12th Annual International Conference on Education and New Learning Technologies, ISBN 978-84-09-17979-4, pages 3084-3093, Palma de Mallorca, Spain, July 2020.
33. **Arpad Gellert**, Constantin-Bala Zamfirescu, *Using Two-Level Context-Based Predictors for Assembly Assistance in Smart Factories*, Intelligent Methods in Computing, Communications

- and Control: 8th International Conference on Computers Communications and Control, Springer, ISBN 978-303-053-650-3 (indexed Scopus), pages 167-176, Oradea, May 2020.
34. **Árpád Gellért**, *Analiza și proiectarea algoritmilor: o abordare pragmatică prin aplicații Java*, Ediția a 2-a, Editura Techno Media, ISBN 978-606-616-360-6, 2019.
35. **Arpad Gellert**, Adrian Florea, Ugo Fiore, Francesco Palmieri, Paolo Zanetti, *A study on forecasting electricity production and consumption in smart cities and factories*, International Journal of Information Management, Elsevier, ISSN 0268-4012 (ISI IF=5.063, Scopus, DBLP), Vol. 49, pages 546-556, December 2019.
36. **Arpad Gellert**, Maria Vintan, Lucian Vintan, *Perceptron-Based Selective Load Value Prediction in a Multicore Architecture*, Romanian Journal of Information Science and Technology, Vol. 22, No. 3-4, ISSN 1453-8245 (ISI IF=0.259), pages 215-227, November 2019.
37. **Gellért Árpád**, *Modern számítógépek: múlt, jelen és jövő*, Nagyszében és vidéke, XXI. évfolyam, 84. szám, 2019/1.
38. **Arpad Gellert**, Adrian Florea, Ugo Fiore, Paolo Zanetti, Lucian Vintan, *Performance and Energy Optimisation in CPUs through Fuzzy Knowledge Representation*, Information Sciences, Elsevier, Vol. 476, ISSN 0020-0255 (ISI IF=4.832, Scopus, DBLP, EBSCO), DOI 10.1016/j.ins.2018.03.029, pages 375-391, February 2019.
39. **Arpad Gellert**, Lucian Vintan, *A Multicore Architecture with Selective Load Value Prediction*, Proceedings of the Romanian Academy, Series A, Vol. 19, No. 4, ISSN 1454-9069 (ISI IF=1.752, Scopus), pages 597-604, November 2018.
40. Ugo Fiore, Adrian Florea, **Arpad Gellert**, Lucian Vintan, Paolo Zanetti, *Optimal Partitioning of LLC in CAT-enabled CPUs to Prevent Side-Channel Attacks*, Cyberspace Safety and Security (CSS 2018), Lecture Notes in Computer Science, Vol. 11161, Springer, ISBN 978-3-030-01688-3 (indexed DBLP, Scopus), pages 115-123, Amalfi, Italy, October 2018.
41. **Arpad Gellert**, Remus Brad, *Studying the influence of search rule and context shape in filtering impulse noise images with Markov chains*, Signal, Image and Video Processing, Springer London, Vol. 12, Issue 2, ISSN 1863-1703 (ISI IF=1.102, Scopus, DBLP), DOI 10.1007/s11760-017-1160-1, pages 315-322, February 2018.
42. Adrian Florea, **Arpad Gellert**, *Developing Heuristics for the Graph Coloring Problem Applied to Register Allocation in Embedded Systems*, Journal of Multimedia Processing and Technologies, Vol. 8, No. 3, ISSN 0976-4127 (indexed DBLP), September 2017.
43. **Arpad Gellert**, *Web Access Mining through Dynamic Decision Trees with Markovian Features*, Journal of Web Engineering, Vol. 16, Issue 5-6, ISSN 1540-9589 (ISI IF=0.622, Scopus, DBLP), pages 524-536, USA, September 2017.
44. Adrian Florea, **Arpad Gellert**, *E-learning Approach of the Graph Coloring Problem Applied to Register Allocation in Embedded Systems*, The 6th International Conference on Innovative Computing Technology (INTECH 2016), ISBN 978-1-5090-2000-3 (indexed ISI, IEEE Xplore, Scopus), pages 88-93, Dublin, Ireland, August 2016.
45. **Arpad Gellert**, Adrian Florea, *Web Prefetching through Efficient Prediction by Partial Matching*, World Wide Web Journal, ISSN 1386-145X (ISI IF=1.405, DBLP, Scopus, EBSCO, ACM Digital Library), DOI 10.1007/s11280-015-0367-8, pages 921-932, USA, September 2016.
46. **Arpad Gellert**, Remus Brad, *Context-Based Prediction Filtering of Impulse Noise Images*, IET Image Processing, Vol. 10, Issue 6, ISSN 1751-9659 (ISI IF=1.044, DBLP, Scopus,

EBSCO, IEEE Xplore), DOI 10.1049/iet-ipr.2015.0702, pages 429-437, Stevenage, United Kingdom, June 2016.

47. Adrian Florea, **Arpad Gellert**, Delilah Florea, Adrian-Cristian Florea, *Teaching Programming by Developing Games in Alice*, The 12th International Scientific Conference "eLearning and Software for Education" (eLSE 2016), ISSN 2066-026X (indexed ISI), Vol. 1, DOI 10.12753/2066-026X-16-073, Bucharest, April 2016.
48. Adrian Florea, Elimelec Burghela, **Arpad Gellert**, Delilah Florea, *MiniGL: Game and Learning*, The 11th International Scientific Conference "eLearning and Software for Education" (eLSE 2015), ISSN 2066-026X (indexed ISI), Vol. 1, Bucharest, April 2015.
49. **Arpad Gellert**, Adrian Florea, *Web Page Prediction Enhanced with Confidence Mechanism*, Journal of Web Engineering, Vol. 13, Issue 5-6, ISSN 1540-9589 (ISI IF=0.361, Scopus, DBLP), pages 507-524, USA, November 2014.
50. Adrian Florea, Claudiu Buduleci, Radu Chis, **Arpad Gellert**, Lucian Vintan, *Enhancing the Sniper Simulator with Thermal Measurement*, The 18th International Conference on System Theory, Control and Computing, ISBN: 978-1-4799-4602-0 (Scopus, IEEE Xplore), pages 31-36, Sinaia, October 2014.
51. Adrian Florea, **Arpad Gellert**, *Different Approaches for Solving Optimization Problems using Interactive e-Learning Tools*, The 10th International Scientific Conference "eLearning and Software for Education" (eLSE 2014), ISSN 2066-026X (indexed ISI), Vol. 2, Bucharest, April 2014.
52. **Arpad Gellert**, Adrian Florea, *Investigating a New Design Pattern for Efficient Implementation of Prediction Algorithms*, Journal of Digital Information Management, Vol. 11, Issue 5, ISSN 0972-7272 (DBLP, Scopus, EBSCO), pages 366-377, October 2013.
53. Adrian Florea, Andrei F. Klein, Victor Badea, Mihai Stefanescu, **Arpad Gellert**, *Using FOCAP Tool for Teaching Microarchitecture Simulation and Optimization*, The 17th International Conference on System Theory, Control and Computing (ICSTCC 2013), ISBN: 978-1-4799-2228-4 (indexed ISI, Scopus, IEEE Xplore), pages 225-230, Sinaia, October 2013.
54. Traian Anghel, Adrian Florea, **Arpad Gellert**, Delilah Florea, *Developing Online Collaborative Games for e-Learning Environments*, The Second International Symposium on Knowledge Management and E-Learning (KMEL 2012), pages 81-90, Sinaia, September 2012, republished in *Lecture Notes in Computer Science*, New Horizons in Web Based Learning, ISBN 978-3-662-43453-6 (DBLP, Scopus), Vol. 7697, pages 221-230, 2014.
55. **Arpad Gellert**, Horia Calborean, Lucian Vintan, Adrian Florea, *Multi-Objective Optimizations for a Superscalar Architecture with Selective Value Prediction*, IET Computers & Digital Techniques, Vol. 6, Issue 4, ISSN: 1751-8601 (ISI IF=0.284, Scopus, DBLP), pages 205-213, Stevenage, United Kingdom, July 2012.
56. Adrian Florea, Alexandru Ratiu, **Arpad Gellert**, Lucian Vintan, *A Visual Simulation Framework for Simultaneous Multithreading Architectures*, The 25th European Conference on Modelling and Simulation (ECMS 2011), ISBN: 978-0-9564944-2-9 (indexed ISI, Scopus, DBLP), Krakow, Poland, June 2011.
57. Traian Anghel, Adrian Florea, **Arpad Gellert**, Delilah Florea, *Web-Based Technologies for Online e-Learning Environments*, 7th International Scientific Conference "eLearning and Software for Education" (eLSE 2011), ISSN: 2066-026X (indexed ISI), Vol. II, pages 502-509, Bucharest, April 2011.

58. Adrian Florea, **Arpad Gellert**, Traian Anghel, Delilah Florea, *Enhanced Learning and Educational Management through Online Collaborative Technologies*, Journal of Digital Information Management, Vol. 9, No. 1, ISSN 0972-7272 (DBLP, EBSCO, Scopus), pages 33-42, February 2011.
59. **Árpád Gellért**, *Analiza și proiectarea algoritmilor: o abordare pragmatică prin aplicații Java*, Editura Techno Media, ISBN 978-606-8030-81-4, 2010.
60. Adrian Florea, **Arpad Gellert**, Traian Anghel, Delilah Florea, *Online Collaborative Education Management Tool*, Proceedings of the 5th International Conference on Virtual Learning, ISSN 1844-893 (indexed ISI), pp. 367-374, Targu Mures, October 2010.
61. **Árpád Gellért**, Rodica Baciu, *Programare în limbaj de asamblare: îndrumar de laborator*, Editura Techno Media, ISBN 978-606-8030-79-1, 2010.
62. **Arpad Gellert**, Gianluca Palermo, Vittorio Zaccaria, Adrian Florea, Lucian Vintan, Cristina Silvano, *Energy-Performance Design Space Exploration in SMT Architectures Exploiting Selective Load Value Predictions*, International Conference on Design, Automation and Test in Europe (DATE 2010), ISBN: 978-3-9810801-6-2 (indexed ISI, Scopus, DBLP, ACM Digital Library, IEEE Xplore), pages 271-274, Dresden, Germany, March 2010.
63. Ciprian Radu, Horia Calborean, Adrian Florea, **Arpad Gellert**, Lucian Vintan, *Exploring Some Multicore Research Opportunities. A First Attempt.*, Advanced Computer Architecture and Compilation for Embedded Systems (ACACES 2009), ISBN 978 90 382 1467 2, Terrassa, Spain, 2009.
64. **Arpad Gellert**, Adrian Florea, Lucian Vintan, *Exploiting Selective Instruction Reuse and Value Prediction in a Superscalar Architecture*, Journal of Systems Architecture, Elsevier, Vol. 55, Issue 3, ISSN 1383-7621 (ISI IF=0.722, Scopus, DBLP, ACM Digital Library, EBSCO), pages 188-195, The Netherlands, 2009.
65. Adrian Florea, **Arpad Gellert**, Lucian Vintan, Marius Veltan, *The Impact of Java Applications at Microarchitectural Level from Branch Prediction Perspective*, International Journal of Computers, Communications & Control, Vol. IV, No. 1, ISSN 1841-9836, E-ISSN 1841-9844 (ISI IF=0.373, Scopus), pages 27-40, 2009.
66. **Árpád Gellért**, *Beyond the Limits of Modern Processors*, Matrix Rom Publishing House, ISBN 978-973-755-426-0, Bucharest, 2008.
67. **Árpád Gellért**, *Advanced Prediction Methods Integrated Into Speculative Computer Architectures*, PhD Thesis, Computer Science Department, "Lucian Blaga" University of Sibiu, November 2008.
68. Lucian Vintan, Adrian Florea, **Arpad Gellert**, *Random Degrees of Unbiased Branches*, Proceedings of the Romanian Academy, Series A, Vol. 9, No. 3, ISSN 1454-9069 (ISI, Scopus), pages 259-268, 2008.
69. Lucian Vintan, Adrian Florea, **Arpad Gellert**, *Forcing Some Architectural Ceilings of the Actual Processor Paradigm*, Invited Paper, The 3rd Conference of The Academy of Technical Sciences from Romania (ASTR), Cluj-Napoca, November 2008.
70. **Arpad Gellert**, *Developing and Improving the Performances of Some Predictive Architectures*, Third PhD Report, Computer Science Department, "Lucian Blaga" University of Sibiu, April 2008.
71. **Árpád Gellért**, Lucian N. Vințan, Adrian Florea, *A Systematic Approach to Predict Unbiased Branches*, "Lucian Blaga" University Press, ISBN 978-973-739-516-0, 111 pages, 2007.

72. Adrian Florea, Ciprian Radu, Horia Calborean, Adrian Crapciu, **Arpad Gellert**, Lucian Vintan, *Understanding and Predicting Unbiased Branches in General-Purpose Applications*, Bulletin of the Polytechnic Institute of Iasi, Tom LIII (LVII), Fasc. 1-4, Section IV, ISSN 1220-2169 (indexed Zentralblatt), 2007.
73. Adrian Florea, Ciprian Radu, Horia Calborean, Adrian Crapciu, **Arpad Gellert**, Lucian Vintan, *Designing an Advanced Simulator for Unbiased Branches Prediction*, Proceedings of 9th International Symposium on Automatic Control and Computer Science, ISSN 1843-665X, Iasi, 2007.
74. Ciprian Radu, Horia Calborean, Adrian Crapciu, **Arpad Gellert**, Adrian Florea, *An Interactive Graphical Trace-Driven Simulator for Teaching Branch Prediction in Computer Architecture*, The 6th EUROSIM Congress on Modelling and Simulation, (EUROSIM 2007), ISBN 978-3-901608-32-2, Ljubljana, Slovenia, September 2007.
75. **Arpad Gellert**, Adrian Florea, Maria Vintan, Colin Egan, Lucian Vintan, *Unbiased Branches: An Open Problem*, Twelfth Asia-Pacific Computer Systems Architecture Conference (ACSAC 2007), published in *Lecture Notes in Computer Science*, Springer-Verlag Berlin Heidelberg, Vol. 4697/2007, ISSN 0302-9743, ISBN 978-3-540-74308-8 (indexed ISI, Scopus, DBLP, ACM Digital Library), pages 16-27, Seoul, Korea, August 2007.
76. **Arpad Gellert**, *Integration of Some Advanced Prediction Methods Into Speculative Computing Systems*, Second PhD Report, Computer Science Department, "Lucian Blaga" University of Sibiu, March 2007.
77. Lucian Vintan, **Arpad Gellert**, Adrian Florea, Marius Oancea, Colin Egan, *Understanding Prediction Limits Through Unbiased Branches*, Eleventh Asia-Pacific Computer Systems Architecture Conference (ACSAC 2006), published in *Lecture Notes in Computer Science*, Springer-Verlag Berlin Heidelberg, Vol. 4186/2006, ISSN 0302-9743, ISBN 978-3-540-40056-1 (ISI IF=0.402, Scopus, DBLP, ACM Digital Library), pages 480-487, Shanghai, China, September 2006.
78. Marius Oancea, **Arpad Gellert**, Adrian Florea, Lucian Vințan, *Analyzing Branch Prediction Contexts Influence*, Advanced Computer Architecture and Compilation for Embedded Systems, (ACACES 2006), ISBN 90 382 0981 9, pages 5-8, L'Aquila, Italy, July 2006.
79. Adrian Florea, **Arpad Gellert**, *Memory Wall — A Critical Factor in Current High-Performance Microprocessors*, Science and Supercomputing in Europe, ISBN 978-88-86037-19-8, pages 257-264, Barcelona, Spain, 2006.
80. **Arpad Gellert**, Adrian Florea, *Finding and Solving Difficult Predictable Branches*, Science and Supercomputing in Europe, ISBN 978-88-86037-19-8, pages 265-271, Barcelona, Spain, 2006.
81. **Arpad Gellert**, Lucian Vintan, *Person Movement Prediction Using Hidden Markov Models*, Studies in Informatics and Control, Vol. 15, No. 1, ISSN 1220-1766 (IEE INSPEC), National Institute for Research and Development in Informatics, Bucharest, March 2006.
82. **Arpad Gellert**, *Prediction Methods Integrated Into Advanced Architectures*, First PhD Report, Computer Science Department, "Lucian Blaga" University of Sibiu, January 2006.
83. Lucian Vințan, Adrian Florea, **Arpad Gellert**, *Focalising Dynamic Value Prediction to CPU's Context*, IEE Proceedings – Computers & Digital Techniques, Vol. 152, No. 4, ISSN 1350-2387 (ISI IF=0.533, Scopus), pages 473-481, Stevenage, United Kingdom, July 2005.
84. Lucian Vințan, **Arpad Gellert**, Adrian Florea, *Value Prediction Focalized on CPU Registers*, Advanced Computer Architecture and Compilation for Embedded Systems,

(ACACES 2005), Academia Press, ISBN 90 382 0802 2, pages 181-184, Ghent, Belgium, July 2005.

85. Lucian Vințan, **Arpad Gellert**, Adrian Florea, *Register Value Prediction Using Metapredictors*, Proceedings of the 8th International Symposium on Automatic Control and Computer Science, Iasi, October 2004, republished in Bulletin of the Polytechnic Institute of Iasi, Fasc. 1-4, Section IV, Tomul L (LIV), ISSN 1220-2169 (indexed Zentralblatt), pp. 109-122, Iasi, 2004.
86. Jan Petzold, Theo Ungerer, Lucian Vintan, **Arpad Gellert**, *Comparative Study of Location Prediction by Neural Network and State Predictor Methods*, University of Augsburg, Germany, 2014.
87. Lucian Vințan, **Arpad Gellert**, Jan Petzold, Theo Ungerer, *Person Movement Prediction Using Neural Networks*, Proceedings of the KI2004 International Workshop on Modeling and Retrieval of Context (MRC 2004), Vol-114, ISSN 1613-0073 (CiteSeer^X), Ulm, Germany, September 2004.
88. Ioan Z. Mihu, **Arpad Gellert**, Horia V. Caprita, *Improving the Recognition System Architecture in Order to Increase the Set of Recognized Geometric Shapes*, Proceedings of the International Conference on Computers and Communications (ICCC 2004), ISBN 973-613-542-X, pages 241-247, Oradea, May 2004.
89. Ioan Z. Mihu, Horia V. Caprita, **Arpad Gellert**, *Parallel Programming Using MPI Library on Message-Passing Architectures*, Proceedings of the 6th International Conference on Technical Informatics (CONTI 2004), Transactions on Automatic Control and Computer Science, vol. 4, ISSN 1224-600X, pages 37-42, Timisoara, May 2004.
90. Ioan Z. Mihu, **Arpad Gellert**, Horia V. Caprita, *Improved Methods of Geometric Shape Recognition Using Fuzzy and Neural Techniques*, Proceedings of the 6th International Conference on Technical Informatics (CONTI 2004), Transactions on Automatic Control and Computer Science, vol. 4, ISSN 1224-600X, pages 99-104, Timisoara, May 2004.
91. Lucian Vințan, **Arpad Gellert**, Jan Petzold, Theo Ungerer, *Person Movement Prediction Using Neural Networks*, Technical Report 2004-10 (<http://www.informatik.uni-augsburg.de/skripts/techreports/>), Institute of Computer Science, University of Augsburg, Germany, April 2004.
92. Ioan Z. Mihu, **Arpad Gellert**, Cosmin N. Suciu, *Hierarchical Architecture Implying Fuzzy and Neural Techniques for On-Line Geometric Shape Recognition*, Annals of the University of Craiova, vol. 27, ISSN 1223-530X, pages 173-180, Craiova, 2003.
93. Ioan Z. Mihu, **Arpad Gellert**, Cosmin N. Suciu, *Geometric Shape Recognition Using Fuzzy and Neural Techniques*, Proceedings of the 11th International Scientific Symposium (SINTES 11), ISBN 973-8043-416-6, pages 354 – 358, Craiova, October 2003.
94. Ioana I. Moisil, **Arpad Gellert**, *Introducing Object-Oriented Applications with the Caché Database System*, Proceedings of the 2nd Balkan Region Conference on Engineering Education, ISBN 973-651-673-3 (indexed ISI), pages 194 - 197, Sibiu, September 2003.