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Lista de lucrări

în domeniul „Calculatoare și tehnologia informației"

A. Teza de doctorat / abilitare

1. **Caşcaval, Petru**, "New results in digital circuit testing", PhD Thesis, „Gheorghe Asachi" Technical University of Iași, 2001, Supervisor Prof. Corneliu Huţanu.
2. **Caşcaval, Petru**, RAM Memory Testing and Reliability Engineering in Complex Systems, Habilitation Thesis, „Gheorghe Asachi" Technical University of Iași, 2023.

B. Capitole de carte publicate în străinătate

1. **Caşcaval, P.**, Leon, F., Active Redundancy Allocation in Complex Systems by Using Different Optimization Methods, Computational Collective Intelligence, August 2019, Springer, pp. 625-637.
2. Floria, S.A., Leon, F., **Caşcaval, P.**, Logofătu D., An Evaluation of Various Regression Models for the Prediction of Two-Terminal Network Reliability, Artificial Neural Networks and Machine Learning – ICANN 2019: Theoretical Neural Computation, Springer, pp. 267-280.
3. **Caşcaval, P.**, Craus, M., Caşcaval, D., 2002, *A Simplified Approach of Machines Interference Problem*, Recent Advances in Circuits, Systems and Signal Processing, WSEAS Press, Athens, 2002, pp. 163–168, ISBN: 960-8052-64-5.
4. **Caşcaval, P.**, Onea, A., *March Test Algorithm for 3-Coupling Faults in Random Access Memories, Advances in Systems Theory, Mathe matical Methods and Applications*, WSEAS Press, Athens, 2002, pp. 188–194, ISBN: 960-8052-61-0.

C. Cărţi publicate în ţară, la edituri recunoscute CNCSIS

1. **Caşcaval, P.**, *Sisteme de timp real – Fiabilitate și siguranță în funcționare*, Performantica, Iaşi, 2007, 195 pg., ISBN: 973-730-325-3, 978-973-730-325-7.
2. **Caşcaval, P.**, Caşcaval, D., *Modelarea şi simularea sistemelor cu evenimente discrete*, Performantica, Iaşi, 2006, 263 pg., ISBN: 973-730-306-7, 978-973-730-306-6.
3. **Caşcaval, P.,** Caşcaval, D., *Modelare şi simulare*, Editura "Gheorghe Asachi", Iaşi, 2002, 194 pg., ISBN: 973-8292-68-9.
4. Colectiv de autori, Coordonator C. Botez, Teste de informatică, 235 pg., Editura "Gheorghe Asachi", Iaşi, 2001, ISBN : 973-8050-93-6

D. Cărţi (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

1. Neaga, C., **Caşcaval, P**., Baze de date dBAZE IV, 214 pg., Universitatea Tehnică "Gheorghe Asachi", Iaşi, 1996.

E. Lucrări ştiinţifice publicate în reviste cotate ISI sau indexate BDI

1. **Caşcaval, P.**, Caşcaval, D., Near-Optimal Multirun March Memory Test Algorithms for Neighborhood Pattern-Sensitive Faults in Random-Access Memories, Mathematics 2025, 13(16), 2594 (**Q1**); https://doi.org/10.3390/math13162594
2. Leon, F., **Caşcaval, P.**, Optimization Method for Reliability–Redundancy Allocation Problem in Large Hybrid Binary Systems, Mathematics 2025, 13(15), 2450 (**Q1**); https://doi.org/10.3390/math13152450
3. **Caşcaval, P**., Caşcaval, D., Near-optimal March Tests for Three-Cell and Four-Cell Coupling Fault Models in Random-Access Memories, Romanian Journal of Information Science and Technology (ROMJIST), Vol. 27 (3-4), 2024, pp. 323–335 (**Q1**),

   DOI: 10.59277/ROMJIST.2024.3-4.06
4. **Caşcaval, P.**; Leon, F., Optimization Methods for Redundancy Allocation in Hybrid Structure Large Binary Systems, Mathematics, Vol.10 (19), October 2022 (**Q1**) https://doi.org/10.3390/math10193698.
5. Leon, F., **Caşcaval**, **P.**, Bădică, C., Optimization Methods for Redundancy Allocation in Large Systems, Vietnam Journal of Computer Science, Vol. 7, No. 3, 281-299, 2020, https://doi.org/10.1142/S2196888820500165 (Q3).
6. **Caşcaval, P.**, Caşcaval, D., *March test algorithm for unlinked static reduced three-cell coupling faults in random-access memories*, Microelectronics Journal, Elsevier, Vol. 93, November 2019, https://doi.org/10.1016/j.mejo.2019.104619 (Q3).
7. **Caşcaval, P.**, *Approximate Method to Evaluate Reliability of Complex Networks*, Complexity, Wiley, Volume 2018, Article ID 5967604, 11 pages (**Q2**) https://doi.org/10.1155/2018/5967604.
8. Caşcaval, D., **Caşcaval, P.**, *A Comparative Study on the Methods of Automatic Fabric Inspection*, Bul. Inst. Polit. Iasi, Automatică şi Calculatoare, Vol. 62 (66), Fasc. 1-2, 9-18, 2016.
9. Caşcaval, D., **Caşcaval, P.**, *Software* Application *for Regression Analysys and Process Optimization*, Bul. Inst. Polit. Iasi, Automatică şi Calculatoare, Tom LX (LXIV), Fasc. 3, 59-68, 2014.
10. Huzum, C., **Caşcaval, P.**, *A Multibackground March Test for Static Neighborhood Pattern-Sensitive Faults in Random-Access Memories*, Electronics and Electrical Engineering (Elektronika ir Elektrotechnika) – Section System Engineering, Computer Technology, Vol. 119 (3) , 81-86, 2012 (Q3).
11. Huzum, C., **Caşcaval, P.**, *Dynamic Neighborhood Pattern-Sensitive Faults in Random-Access Memories. A Fault Coverage Evaluation*, Bul. Inst. Polit. Iasi, Tom LVII (LXI), Fasc. 4, Automatică şi Calculatoare, 21-31, 2011.
12. Huzum, C., **Caşcaval, P.**, *A Fault Coverage Evaluation of Linked Neighborhood Pattern-Sensitive Faults in Random-Access Memories*, Annals of the University of Craiova, Series Automation, Computers, Electronics and Mechatronics, vol. 7 (34), No. 1, 21-26, 2010.
13. **Caşcaval, P.,** Caşcaval, D., *March SR3C: A Test for a reduced model of all static simple three-cell coupling faults in random-access memories*, Microelectronics Journal, vol. 41, Issue 4, 212-218, 2010, doi:10.1016/j.mejo.2010.02.004 (Q3)
14. **Caşcaval, P.**, Silion, R., Caşcaval, D., *A Logic Design for MarchS3C Memory Test BIST Implementation*, Romanian Journal of Information Science and Technology, Vol. 12, No.4, 2009, 440-454 (**Q2**).

15. Huzum, C., **Caşcaval, P.**, *A Fault Primitive Based Model for all Static Neighborhood Pattern-Sensitive Faults in Random Access Memories*, Bul. Inst. Polit. Iasi, Tom LV (LIX), Fasc. 3, Automatică şi Calculatoare, 63-74, 2009.
16. **Caşcaval, P.**, Silion, R., Caşcaval, D., Huzum, C., *A Fault Primitive Based Model of All Static Four-Cell Coupling Faults in Random-Access Memories*, Bul. Inst. Polit. Iasi, Tom LIV (LVIII), Fasc.1, Automatică şi Calculatoare, 51-60, 2008.
17. **Caşcaval, P.**, Silion, R., *March Test for 3-Coupling Faults in Random-Access Memories. A Built-in Self-Testing Logic Design*, WSEAS Trans. on Computers, 6 (2), Feb. 2007, 215-222.
18. **Caşcaval, P.**, Caşcaval, D., *March Test for a Reduced Model of All Ram Static 3-Cell Coupling Faults*, Bul. Inst. Polit. Iasi, Tom LIII (LVII), Fasc.1-4, Automatică şi Calculatoare, 87-96, 2007.
19. **Caşcaval, P.**, Silion, R., Stan, A., *Marchs2C: A Test For All Static 2-Cell Ram Coupling Faults*, Bul. Inst. Polit. Iasi, Tom LII (LVI), Fasc.1-4, Automatică şi Calculatoare, 79-86, 2006.
20. **Caşcaval, P.**, Caşcaval, D., *Analytical and Simulation Approach for Efficiency Evaluation of the Weaving Machines with Automatic Filling Repair*, WSEAS Transactions on Systems, Vol. 5 (12), 2825-2832, 2006.
21. Caşcaval, D., **Caşcaval, P.**, *Analytical and Simulation Approach for Efficiency Evaluation of the Weaving Machines with Filling Break Toleran*ce, WSEAS Transactions on Information Science and Applications, Vol. 2 (12), 2243-2251, 2005.
22. **Caşcaval, P.**, Caşcaval, D., *Fault Tolerant Memory System with Active Redundancy for Critical Applications*, International Scientific Journal of Computing, Vol. 4 (1), 80-86, 2005.
23. **Caşcaval, P.**, Botez, B.A., *Recursive Algorithm for 2-Terminal Network Reliability Evaluation*, Bul. Inst. Polit. Iasi, LI (LV), Fasc.1-4, Automatică şi Calculatoare, pp. 137-146, 2005.
24. Caşcaval, D., **Caşcaval, P.**, *Markov Chains Based Modelling of Weaving Machines with Filling Break Tolerance and Automatic Filling Repair*, Bul. Instit. Polit. Iaşi, LI (LV), Fasc.1-4, Automatică şi Calculatoare, 147-156, 2005.
25. **Caşcaval, P.**, Bennett, S., Huţanu, C., *Efficient March Tests for a Reduced 3-Coupling and 4-Coupling Faults in Random-Access Memories*, Journal of Electronic Testing: Theory and Applications, Springer, Vol. 20 (3), pp. 227–243, 2004 (Q4).
26. **Caşcaval, P.**, Romanescu, B.F., *Complementary Approaches for the Network Reliability Evaluation: Network Decomposition and Monte Carlo Simulation*, Bul. Inst. Polit. Iaşi, Tomul L (LIV), Fasc. 1-4, Automatică şi Calculatoare, 123-131, 2004.
27. **Caşcaval, P.**, Macovei, A.R., *Reliability Evaluation by Network Decomposition*, Bul. Inst. Polit. Iaşi, Tomul XLIX (LIII), Fasc. 1-4, Automatică şi Calculatoare, 56-65, 2003.
28. **Caşcaval, P.**, *Efficient March Test for Reduced Model of 3-Coupling Faults in Random-Access Memories*, Bul. Inst. Polit. Iaşi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, pp. 99-110, 2002.
29. **Caşcaval, P.**, Bennett, S., *Efficient March Test for 3-Coupling Faults in Random Access Memories*, Microprocessors and Microsystems, Elsevier Science, Vol. 24 (10), pp. 501–509, 2001 (**Q2**).
30. **Caşcaval, P.**, *High Reliable and Safe RAM Memory System for Critical Applications*, Bul. Inst. Polit. Iaşi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, 179-185, 2001.
31. **Caşcaval, P.**, Huţanu, C., *On Finding an Optimal Test to Cover Faults in Combinational Logic Circuits*, Bul. Inst. Polit. Iaşi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, 129-135, 2001.

32. **Caşcaval, P.**, Huţanu, C., *Fault Oriented Test Pattern Generation for Sequential Logic Circuits,* Bul. Instit. Polit. din Iaşi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, 121-127, 2001.
33. **Caşcaval, P.**, Caşcaval, D., Craus, M., *Reduced Markov Model for Systems Interference Problem*, Bul. Inst. Polit. din Iasi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, 169-177, 2001.
34. Craus, M., Ardelean, D., **Caşcaval, P**., *Optimized Systolic Array for a Non Uniform Recurrence*, Bul. Inst. Polit. din Iasi, Tomul XLVII (LI), Fasc.1-4, Automatică şi Calculatoare, 163-168, 2001.
35. **Caşcaval, P.**, *Interacting Coupling Faults in Random Access Memories*, Bul. Inst. Polit. Iaşi, Tomul XLVI (L), Fasc.1-4, Automatică şi Calculatoare, 121-130, 2000.
36. **Caşcaval, P.**, Onofrei, V., *Built-in Self-Testing for Coupling Faults in Random Access Memories*, Bul. Inst. Polit. Iaşi, Tomul XLVI (L), Fasc.1-4, Automatică şi Calculatoare, 93-101, 2000.
37. **Caşcaval, P.**, Huţanu, C., Onofrei, V., *Efficient March Test for Random Access Memories*, Bul. Inst. Polit. Iaşi, Tomul XLV (IL), Fasc.1-4, Automatică şi Calculatoare, 79-88, 1999.
38. **Caşcaval, P.**, Huţanu, C., Silion, R., *Memory Fault Coverage Evaluation for March Tests*, Bul. Inst. Polit. Iaşi, Tomul XLV (IL), Fasc.1-4, Automatică şi Calculatoare, 89-96, 1999.
39. Onofrei, V., Valachi, A., **Caşcaval, P.**, *Synthesis Method for Sequential Machines using Multiplexers*, Bul. Inst. Polit. Iaşi, Tomul XLV (IL), Fasc.1-4, Automatică şi Calculatoare, 97-102, 1999.
40. Caşcaval, D., **Caşcaval, P.**, *Program for Simulation of the Weaving Machines with Filling Break Tolerance*, Bul. Inst. Polit. Iaşi, Tomul XLV (IL), Fasc.1-4, Automatică şi Calculatoare, 103-110, 1999.
41. Silion, R., **Caşcaval, P.**, *Automata Fault Simulation and Test Pattern Generation Using an IBM-PC Compatible Computer*, Bul. Inst. Polit. Iaşi, Tomul XLI (XLV), Fasc.1-4, Automatică şi Calculatoare, 115-119, 1995.

F. Lucrări ştiinţifice publicate în volumele conferinţelor

1. Leon, F., **Caşcaval, P.**, Search algorithm for optimal synthesis of decoder for RAMs with error-correcting codes, 26rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 19-21, 2022, DOI: 10.1109/ICSTCC55426.2022.9931899
2. Leon, F., **Caşcaval, P.**, 01IP and QUBO: Optimization Methods for Redundancy Allocation in Complex Systems, 23rd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, Romania, October 9-11, 2019, DOI: 10.1109/ICSTCC.2019.8885826.
3. **Caşcaval, P.**, Leon, F., Active Redundancy Allocation in Complex Systems by Using Different Optimization Methods, ICCCI 2019: The 11th edition of the International Conference on Computational Collective Intelligence, Hendaye, France, September 4-6, 2019, 625-637.

   DOI: 10.1007/978-3-030-28377-3_52, In book: Computational Collective Intelligence, August 2019, Springer, 625-637.
4. Floria, S.A., Leon, F., **Caşcaval, P.**, Logofătu D., An Evaluation of Various Regression Models for the Prediction of Two-Terminal Network Reliability, 28th International Conference on Artificial Neural Networks, Munich, Germany, September 17–19, 2019,

   DOI: 10.1007/978-3-030-30487-4_21, In book: Artificial Neural Networks and Machine Learning – ICANN 2019: Theoretical Neural Computation, Springer, 267-280.

5. **Caşcaval, P.**, Floria, S.A., Two Approximate Approaches for Reliability Evaluation in Large Networks. Comparative Study, Proceedings of the 22nd International Conference on System Theory, Control and Computing (ICSTCC), Sinaia, 14-16 October, 2018, DOI: 10.1109/ICSTCC.2018.8540730.
6. Floria, S.A., Leon, F., **Caşcaval, P.**, Analyzing the Effects of Virality and Topology for Information Diffusion in Social Networks, Proceedings of the 21st International Conference on System Theory, Control and Computing, ICSTCC 2017, Sinaia, 866-871, DOI: 10.1109/ICSTCC.2017.8107146.
7. **Caşcaval, P.**, Floria, S.A., SDP Algorithm for network reliability evaluation, IEEE Conf., INISTA, Gdynia, Poland, 3-5 July 2017, DOI: 10.1109/INISTA.2017.8001143 (Best Paper Award).
8. Timiş, M., Valachi, A., **Caşcaval, P.**, Silion, R., A Comparison between Coded-Decoded Mode Signals on Multifunctional Registers, 12th Int. Conf. on Development and Application Systems, Suceava, Romania, May 15-17, 2014, 978-1-4799-5094-2/14/$31.00 © 2014 IEEE.
9. Huzum, C., **Caşcaval, P.**, A Multibackground March Test for All Static Simple Neighborhood Pattern-Sensitive Faults in RAMs, 15th International Conference on System Theory, Control and Computing, Sinaia, 14-16 Oct, 2011.
10. **Caşcaval, P.**, *MarchS3C: A Test for a Reduced Model of Static 3-Coupling Faults in Random-Access Memories*, CD-Proc. of the 9th Int. Symp. on Automatic Control and Computer Sience, SACCS'07, Iaşi, 16-18 Nov. 2007, ISSN 1843-665-X.
11. **Caşcaval, P.**, Stan, A., *March Test for All Static 2-Coupling Faults in Random-Accees Memories*, CD-Proc. of the 9th Int. Symp. on Automatic Control and Computer Sience, SACCS'07, Iaşi, 16-18 Nov. 2007, ISSN 1843-665-X.
12. **Caşcaval, P.**, Silion, R., Stan, A., *A Logic Design for MarchS2C Memory Test BIST Implementation*, CD-Proc. of the 9th Int. Symp. on Automatic Control and Computer Sience, SACCS'07, Iaşi, 16-18 Nov. 2007, ISSN 1843-665-X.
13. **Caşcaval, P.**, *March Test for Static 3-Coupling Faults in Random-Access Memorie*s, The 5th WSEAS Int. Conf. on Data Networks, Communications and Computers (DNCOCO-06), Bucharest, October 16-18, 2006, CD-ISBN 960-8457-54-B, ISSN 1790-5117.
14. Caşcaval, D., **Caşcaval, P.**, *A Simplified Analytical Approach for Efficiency Evaluation of the Weaving Machines with Automatic Filling Repair*, 6th WSEAS Int. Conf. on Simulation, Modelling and Optimization (SMO'06), Lisbon, Sept. 22-24,. 2006, CD-ISBN: 960-8457-53-X, ISSN 1790-5117.
15. Caşcaval, D., **Caşcaval, P.**, *A Simplified Analytical Approach for Efficiency Evaluation of the Weaving Machines with Filling Break Tolerance*, Proc.of the 5th WSEAS Int. Conf. on Systems Theory and Scientific Computation, Malta, Sept. 15-17, 2005, CD- ISBN 960-8457-35-1.
16. **Caşcaval, P.**, *BIST Logic Design for a Reduced Model of 3-Coupling Faults in Random-Access Memories*, Proc. of The 4th Int. Conf. on Microelectronics and Computer Science (ICMCS-05), vol II, Chişinău, Sept. 15-17, 2005, pp. 205-209, ISBN 9975-66040-1.
17. Caşcaval, D., **Caşcaval, P.**, Ciocoiu, M., *Calculul analitic şi simularea numerică – Metode complementare de evaluare a randamentului maşinilor de ţesut*, Int. Symp. on Present and Perspective in Textile Engineering, Iaşi, Nov., 2005, pp. 582-588, ISBN 973-730-120-X.
18. Caşcaval, D., **Caşcaval, P.**, Ciocoiu, M., *Metode de simulare cu reţele Petri pentru estimarea randamentului maşinilor de ţesut*, Int. Symp. on Present and Perspective in Textile Engineering, Iaşi, Nov. 2005, pp. 588-597, ISBN 973-730-120-X.

19. **Caşcaval, P.**, Caşcaval, D., *Reduced Markov Model for Efficiency Evaluation of a Weaving Process*, Proceedings of the 9th Int Conf. on the Theory of Machines and Mechanisms, Aug. 31 – Sept. 2, 2004, Liberec, Czech Republic, pp. 183-188, ISBN 973-8075-25-4.

20. Caşcaval, D., Ciocoiu, M., **Caşcaval, P.**, *Real Time Simulation - A Way to Improve the Management of the Weaving Process in a Mill*, Proceedings of the 9th Int'l Conference on the Theory of Machines and Mechanisms, Aug. 31 – Sept. 2, 2004, Liberec, Czech Republic, pp. 209-212, ISBN 973-8075-25-4.

21. **Caşcaval, P.**, Macovei, A.R., *Reliability Evaluation in Computer and Communication Networks*, Proceedings of the 8th Int. Symp. on Automatic Control and Computer Science: SACCS'04, Iaşi, Oct. 22-23, 2004, CD-ISBN 973-621-086-3.

22. Romanescu, B.F., **Caşcaval, P.**, *Reliability Evaluation Program for Large Communication Networks*, Proceedings of the 8th Int. Symp. on Automatic Control and Computer Science: SACCS'2004, Iaşi, Oct. 22-23, 2004, CD-ISBN 973-621-086-3.

23. **Caşcaval, P.**, Onea, A., *March Test Algorithm for 3-Coupling Faults in Random Access Memories,* Proceedings of the 2nd WSEAS Int. Conf. on Information Science and Applications, Cancun, Mexico, May 12-16, 2002, pp. 2841–2846, CD-ISBN 960-805-59-9.

24. **Caşcaval, P.**, Craus, M., Caşcaval, D., *A Simplified Approach of Machines Interference Problem*, Proceeding of the 6th WSEAS International Conferences on Systems, Rethymnon, Crete, July 7-14, 2002, pp. 4031-4036, CD-ISBN 960-8052-63-7.

25. **Caşcaval, P.**, Silion, R., *Memory Test Algorithm Study by Fault Injection Mechanisms*, Proc. of the 6th International Symposium on Automatic Control and Computer Science: SACCS'98, Iaşi, Nov. 20-21, 1998, Vol. II, Matrix Rom, pp. 23-28, ISBN 973-9390- 42-0.

26. Silion, R., **Caşcaval, P.**, *Reliability Evaluation of Logical Circuits by Using the Poage Method*, Proceedings of the 5th International Symposium on Automatic Control and Computer Science: SACCS'95, Iaşi, Oct. 26-27, 1995, pp. 55-58.

27. **Caşcaval, P.**, Silion, R., *Availability Evaluation of Repairable Fault Tolerant Systems using Stochastic Petri Nets*, Proceedings of the 5th Int. Symp. on Automatic Control and Computer Science: SACCS'95, 1995, Iaşi, Oct.26-27, pp. 59-63.

28. **Caşcaval, P.**, Caşcaval, D., *Performance Evaluation of Multiprocessor Systems Using Simulation Methods*, Proceedings of the 5th Int. Symp. on Automatic Control and Computer Science: SACCS'95, Iaşi, 26-27 Oct., 1995, pp. 175-181.

29. Silion, R., **Caşcaval, P.**, *Combinatorial Systems Testability Analysis Program,* Preprints of the 4th International Symposium on Automatic Control and Computer Science: SACCS'93, Iaşi, Oct. 29-30, 1993, pp. 367-370.

30. Silion, R., **Caşcaval, P.**, *Automata Simulation and Testing Program*, Preprints of the 4th International Symp. on Automatic Control and Computer Science: SACCS'93, Iaşi, Oct. 29-30, 1993, pp. 371-374.

31. Silion, R., **Caşcaval, P.**, *Program for Automata Testability Design*, Preprints of the 4th International Symp. on Automatic Control and Computer Science: SACCS'93, Iaşi, Oct. 29-30, 1993, pp. 375-378.

32. Silion, R., **Caşcaval, P.**, *Laboratory System for Simulation and Testing Automata using an IBM-PC Compatible Computer*, Workshop TEMPUS on Computer Science Topics for Control Engineering Education, September 13-15, 1993, Vienna, Austria.

33. Silion, R., **Caşcaval, P.**, *Combinational Logical Circuits Simulating and Testing Program*, Proc. of the Conference on Development and Application Systems: D&AS'92, Suceava, May, 1992, pp. 3-6.

G. Contracte de cercetare

1. Contract de cercetare cu agent economic, Tema contractului: *Structuri redundante pentru creșterea fiabilității sistemelor fotovoltaice și a siguranței lor în funcționare*, Contract nr. 39435/2023, Perioada 2023-2024, Executant: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Valoare contract: 47500 RON, Director: **Petru Caşcaval**, Beneficiar: Societatea Comercială Q SRL, Iași, Stradela Sf. Andrei nr. 13, Înregistrată la Registru Comerțului cu nr: J22-2049-1991, C.I.F.: 193211.
2. Grant CNCSIS de tip A finanţat de MEC, Titlu: Teste de memorie RAM pentru defecte statice de tip cuplaj și defecte dinamice, Cod CNCSIS 231, Tema 11: *Elaborarea de noi teste de memorie de tip march cu o capacitate mai mare de detectare a defectelor statice de tip cuplaj şi a defectelor dinamice*, Contract nr. GR 80/2007, Executant: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director: **Petru Caşcaval**, Valoare 22000 RON.
3. Grant CNCSIS de tip A finanţat de MEC, Titlu: Teste de memorie RAM pentru defecte statice de tip cuplaj și defecte dinamice, Cod CNCSIS 231, Tema 2*: Evaluarea performanţelor celor mai cunoscute teste de memorie privind capacitatea de detectare a defectelor statice de tip cuplaj şi a defectelor dinamice*, Contract nr. GR 217/2006, Executant: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director: **Petru Caşcaval**, Valoare 20000 RON.
4. Proiect de cercetare PRORETA 5 - AI in Motion, Contract nr. 12371/2021 cu Continental Automotive Romania, Director Florin Leon, Valoare 69121 RON, Membru **Petru Caşcaval**.
5. Proiect de cercetare PRORETA 5 - AI in Motion, Contract nr. 1721/2020 cu Continental Automotive Romania, Director Florin Leon, Valoare: 98798 RON, Membru **Petru Caşcaval**.
6. Grant CNCSIS de tip A, finanţat de MEC, Contract nr . A1/GR 164/2006, Tema 16, Cod CNCSIS 421. Tema grantului: *Modele analitice şi de simulare numerică pentru studiul proceselor de ţesere ca procese stochastice cu evenimente discrete*, Executant : Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director Doina Caşcaval, Valoare 2006: 10.000 RON, Membru **Petru Caşcaval**.
7. Proiect CEEX GRAI / Program INFOSOC Contract nr. 74 CEEX - II03/2006. Finanţare: Buget de Stat -Autoritatea Naţională pentru Cercetare Ştiinţifică, Programul „Cercetare de excelenţă". Tema proiectului: *GRID academic pentru aplicaţii complexe*. Director Mitică Craus, Valoare 2006 (sursa-buget de stat): 169 246 RON, Membru **Petru Caşcaval**.
8. Proiect CEEX TERAPERS / Program INFOSOC, Contract nr. 56 – CEEX II-03/2006. Subcontract de finanţare nr. 14720/2006. Finanţare: Buget de Stat -Autoritatea Naţională pentru Cercetare Ştiinţifică. Tema: *Sistem pentru terapia personalizaă a tulburărilor de expresie lingvistică*, Director UTI: Alexandru Valachi, Valoare: 7 000 RON, Membru **Petru Caşcaval**.
9. Grant CNCSIS de tip A, finanţat de MEC, nr. 27637/2005, Tema 11, Cod CNCSIS 421, Tema grantului: *Modele analitice şi de simulare numerică pentru studiul proceselor de ţesere ca procese stochastice cu evenimente discrete*. Executant : Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director: Doina Caşcaval, Valoare: 10.000 RON, Membru **Petru Caşcaval**.
10. Program CERES, cod 1976/f, 2004. Tema proiectului : *Strategii de cercetare şi dezvoltare tehnologică în domeniul tehnologiilor informaţionale şi de comunicaţii în perspectiva integrării în spaţiul de cercetare european*. Beneficiar: IFINH București, Director Alexandru Valachi, Valoarea proiectului: 120.000.000 ROL, Perioada 2004, Membru **Petru Caşcaval**.
11. Grant de cercetare - Banca Mondiala, tip D, grant major, internaţional, Codul CNCSIS 10, Comisia 2. Tema grantului: *Parallel Hard and Distributed Computing Systems. Technology and Applications*. Contract: 44059/1998. Beneficiar: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director Mitică Craus, Valoare etapă 2002 : 10000 USD, Membru **Petru Caşcaval**.

12. Grant de cercetare - Banca Mondiala, tip D, grant major, internaţional, Cod CNCSIS 10, Comisia 2. Tema grantului: *Parallel Hard and Distributed Computing Systems. Technology and Applications*. Contract: 44059/1998. Beneficiar: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director Dan Grigoraş, Valoare etapă 2001 : 14000 USD, Membru **Petru Caşcaval**.
13. Grant de cercetare - Banca Mondiala, tip D, grant major, internaţional, Cod CNCSIS 10, Comisia 2. Tema grantului: *Parallel Hard and Distributed Computing Systems. Technology and Applications*. Contract: 44059/1998. Beneficiar: Universitatea Tehnică „Gheorghe Asachi" din Iaşi, Director Dan Grigoraş, Valoare etapă 2000 : 46000 USD, Membru **Petru Caşcaval**.

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