

# Prof.dr.ing. Ciprian DOBRE

## Lista publicatiilor stiintifice (2000-2016)

**Lista de lucrări relevante pentru realizările profesionale proprii** (autor principal sau corespondent):

1. C. Chilipirea, A.-C. Petre, **C. Dobre**, F. Pop, Enabling Mobile Cloud Wide Spread through an Evolutionary Market-based Approach, in IEEE Systems Journal (ISSN: 1932-8184), vol. PP nr. 99, pp. 1-8, 2015 (IF: 1.980).
2. F. Pop, **C. Dobre**, B.-C. Mocanu, O.-M. Citoreanu, F. Xhafa, Trust models for efficient communication in Mobile Cloud Computing and their applications to e-Commerce, in Enterprise Information Systems (ISSN: 1751-7575), pp. 1-19, 2015 (IF: 9.256).
3. R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, V. Cristea, Interest-Awareness in Data Dissemination for Opportunistic Networks, in Ad Hoc Networks (ISSN: 1570-8705), Elsevier (online), 2014, Volume 25, Part B, pp. 330-345, February 2015 (IF: 1,53).
4. **C. Dobre**, F. Xhafa, Intelligent Services for Big Data Science, in Future Generation Computer Systems (ISSN: 0167-739X), Dobre, C., & Xhafa, F. (2014). Intelligent services for big data science. Future Generation Computer Systems, 37, pp. 267-281 (IF: 2.786).
5. **C. Dobre**, F. Xhafa, Parallel Programming Paradigms and Frameworks in Big Data Era, in International Journal of Parallel Programming (ISSN: 0885-7458), Volume 42, Issue 5, pp. 710-738, 2014 (IF: 0.491).
6. R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, Interaction Predictability of Opportunistic Networks in Academic Environments, in Transactions on Emerging Telecommunications Technologies (ISSN: 2161-3915), Vol. 25 nr. 8, pp. 852-864, 2014 (IF: 1.354).
7. R.-C. Marin, **C. Dobre**, F. Xhafa, A methodology for assessing the predictable behaviour of mobile users in wireless networks, in Concurrency and Computation: Practice and Experience (ISSN: 1532-0634), Vol. 26 nr. 5, pp. 1215-1230, 2014 (IF: 0.997).
8. R.-I. Ciobanu, **C. Dobre**, M. Dascalu, S. Trausan-Matu, V. Cristea, SENSE: A Collaborative Selfish Node Detection and Incentive Mechanism for Opportunistic Networks, in Journal of Network and Computer Applications (JNCA) (ISSN: 1084-8045), vol. 41, pp. 240-249, 2014. (IF: 2,229) .
9. R.-I. Ciobanu, D. Reina, **C. Dobre**, S. Toral, P. Johnson, JDER: A history-based forwarding scheme for Delay Tolerant Networks using Jaccard Distance and Encountered Ration, in Journal of Network and Computer Applications (ISSN: 1084-8045 vol. 40, pp. 279-291, 2014 (IF: 2,229)
10. **C. Dobre**, Simulation analysis of data processing activities in Compact Muon Solenoid physics, in Simulation: Transactions of the Society for Modeling and Simulation International (SIAM) (ISSN: 0037-5497), 88(12), pp. 1438-1455, 2012 (IF: 0,818).

**Cărți publicate (Ca, Cb, Cc), îndrumare publicate (I1, I2 etc.), capitole publicate în volume colective, capitole teoretice redactate, sisteme de laborator funcționale etc. (D1, D2 etc.),**

**Ca1.** M. Popovici, A. Agache, **C. Dobre**. A survey of Temporal Knowledge Representation and Reasoning, Ed. Politehnica Press, ISBN: 978-606-515-391-2 , 2012.

**Ca2.** V. Cristea, F. Pop, **C. Dobre**, C. Leordeanu, A. Costan, E. Tirsa, E. Apostol, C. Stratan. Sisteme Distribuite de Mari Dimensiuni. Modele si Tehnici de Asigurare a Fiabilitatii, Sigurantei, Disponibilitatii si Securitatii. Ed. Politehnica Press, ISBN: 978-606-515-343-1, 2011.

**Ca3.** V. Cristea, M. Tanase, F. Pop, R. Constantinescu, C. Dobre, A. Toma. Platforma integrata pentru realizarea de tranzactii si servicii electronice de pe echipamente mobile larg raspandite. Ed. Politehnica Press, ISBN: 978-606-515-342-4, 2011.

**Ca4.** **C. Dobre**. Advanced techniques for modeling and simulation of Grid systems. LAP Lambert Academic Publishing, ISBN: 978-3-8433-8042-3, 216 pg, December 2010.

**Ca5.** V. Cristea, **C. Dobre**, C. Stratan, F. Pop, A. Costan. Large-scale Distributed Computing and Applications: Models and Trends. Ed. Information Science Publishing, ISBN : 978-1615207039, 390 pg, April 2010.

**Ca6.** **Ciprian Dobre**, Florin Pop, *Sisteme de Programe pentru Rețele de Calculatoare. Aplicații practice*. Ed. Politehnica Press, ISBN: 978-606-515-000-3, 198 pg, 2008.

- D1.** M. Costea, R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, C. X. Mavromoustakis, G. Mastorakis, Causal and Total Order in Opportunistic Networks, in Emerging Innovations in Wireless Networks and Broadband Technologies, Naveen Chilamkurti (Ed.), IGI Global, chapter 10, pp. 221-262, 2016.
- D2.** O. Shiakallis, C. X. Mavromoustakis, G. Mastorakis, A. Bourdema, E. Pallis, E. Markakis, **C. Dobre**, N. Chilamkurti, A Scheduling Scheme for Throughput Optimization in Mobile Peer-to-Peer Networks, in Emerging Innovations in Wireless Networks and Broadband Technologies, Naveen Chilamkurti (Ed.), IGI Global, chapter 8, pp. 169-198, 2016.
- D3.** B.-C. Mocanu, F. Pop, **C. Dobre**, V. Cristea, Self-adaptive Overlay Networks, in Pervasive Computing, 1st Edition. Next Generation Platforms for Intelligent Data Collection, C. Dobre, F. Xhafa (Eds.), Elsevier, 2016.
- D4.** R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, V. Cristea, ONSIDE-SELF: A Selfish Node Detection and Incentive Mechanism for Opportunistic Dissemination, in "Internet of Things (IoT) in 5G Mobile Technologies", C.X. Mavromoustakis, G. Mastorakis, J.M. Batalla (Eds.), Springer, pp. 317-332, 2015.
- D5.** R. Goleva, R. Stainov, D. Wagenknecht-Dimitrova, S. Mirtchev, D. Atamian, C. X. Mavromoustakis, G. Mastorakis, **C. Dobre**, A. Savov, P. Draganov, Data and Traffic Models in 5G Network, in ""Internet of Things (IoT) in 5G Mobile Technologies"", C.X. Mavromoustakis, G. Mastorakis, J.M. Batalla (Eds.), Springer, pp. 485-496, 2015."
- D6.** R.-C. Marin, R.-I. Ciobanu, R. Pasea, V. Barosan, M. Costea, **D1.** Context-awareness in Opportunistic Mobile Cloud Computing, in Resource Management of Mobile Cloud Computing Networks and Environments, George Mastorakis, Constantinos X. Mavromoustakis, Evangelos Pallis (Eds.), Advances in Systems Analysis, Software Engineering, and High Performance Computing (ASASEHPC) Book Series, IGI Global, pp. 203-237, Online 27 May, 2015.
- D7.** R.-I. Ciobanu, **C. Dobre**, Employing Opportunistic Networks in Dementia Patient Monitoring, in Advanced Technological Solutions for Dementia Patient Monitoring, Fatos Xhafa, Philip Moore, George Tadros (Eds.), Advances in Medical Technologies and Clinical Practice (AMTCP) Book Series, IGI Global, pp. 106-136, Online 27 May, 2015.
- D8.** **C. Dobre**, F. Xhafa, NoSQL Technologies for Real Time (Patient) Monitoring, in Advanced Technological Solutions for Dementia Patient Monitoring, Fatos Xhafa, Philip Moore, George Tadros (Eds.), Advances in Medical Technologies and Clinical Practice (AMTCP) Book Series, IGI Global, pp. 183-210, Online 27 May, 2015.
- D9.** C. Chilipirea, A.-C. Petre, **C. Dobre**, F. Pop, F. Xhafa, Enabling Vehicular Data with Distributed Machine Learning, in Transactions on Computational Collective Intelligence XIX, Vol. 9380 of the series Lecture Notes in Computer Science, pp. 89-102, 2015.
- D10.** R.-I. Ciobanu, **C. Dobre**, F. Xhafa, Data Modeling for Socially Based Routing in Opportunistic Networks, in Modeling and Processing for Next-Generation Big-Data Technologies Modeling and Optimization in Science and Technologies, Springer, Vol. 4, pp 29-55, 2015.
- D11.** R.-I. Ciobanu, V. Cristea, **C. Dobre**, F. Pop, Big Data Platforms for the Internet of Things, in Big Data and Internet of Things: A Roadmap for Smart Environments, C. Dobre, N. Bessis (Ed.), Studies in Computational Intelligence, vol. 546, Springer, ISBN: 978-3-319-05028-7, pg. 3-34, 2014.
- D12.** D. Al-Jumeily, M. Al-Zawi, A. J. Hussain, **C. Dobre**, Adaptive Pipelined Neural Network Structure in Self-aware Internet of Things, in Big Data and Internet of Things: A Roadmap for Smart Environments, Nik Bessis, Ciprian Dobre (Eds.), Studies in Computational Intelligence, Volume 546, pp 111-136, 2014.
- D13.** A.-C. Petre, C. Chilipirea, **C. Dobre**, Delay Tolerant Networks for Disaster Scenarios, in Resource Management in Mobile Computing Environments Modeling and Optimization in Science and Technologies, Springer, Vol. 3, pp 3-24, 2014.
- D14.** R.-C. Marin, R.-I. Ciobanu, **C. Dobre**, F. Xhafa, Techniques and Applications to Analyze Mobility Data, in Inter-cooperative Collective Intelligence: Techniques and Applications, Nik Bessis, Fatos Xhafa (Eds.), Studies in Computational Intelligence, Volume 495, Springer, pp. 203-237, 2014.
- D15.** F. Pop, **C. Dobre**, C. Negru, V. Cristea, Re-scheduling Service for Distributed Systems, in Advances in Intelligent Control Systems and Computer Science, Advances in Intelligent Systems and Computing, Vol. 187, pp. 423-437, Ed. Springer, ISBN: 978-3-642-32547-2, 2013.
- D16.** **C. Dobre**, CAPIM: A platform for Context-Aware Computing, Book chapter in "Advances in Engineering: from Theory to Application", Eds.: Ecaterina Andronescu, Cornelius Burileanu, Editura Politehnica Press, pp.: 29-36, 2012, ISBN: 978-606-515-381-3.
- D17.** V. Cristea, **C. Dobre**, F. Pop. Context-Aware Environments for the Internet of Things, in Internet of Things and Inter-cooperative Computational Technologies for Collective Intelligence, Nik Bessis, Fatos Xhafa, Dora Varvarigou, Richard Hill, Maozhen Li (Eds.), Studies in Computational Intelligence, Volume 460, Ed. Springer, pp 25-49, 2013.
- D18.** **C. Dobre**, F. Pop, V. Cristea. A Simulation Model for Mechanisms, Heuristics and Rules for P2P Systems, in Artificial Intelligence-based Models and Techniques in Scalable Computing, Series: Studies in Computational

Intelligence, Joanna Kolodziej, Samee Ullah Khan, Tadeusz Burczynski (Eds.), Springer, Vol. 422, pp. 235-267, 2012.

**D19.** D. Popescu, N. Popescu, **C. Dobre**. E-Frameworks to Optimize Public Administration Services, in Digital Democracy: Concepts, Methodologies, Tools, and Applications (3 Vols.), IGI Global, pp. 438-465, 2012.

**D20.** V. Cristea, F. Pop, **C. Dobre**, A. Costan. Distributed Architectures for Event-Based Systems, in Reasoning in Event-Based Distributed Systems, Sven Helmer, Alexandra Poulovassilis, Fatos Xhafa (Eds.), Studies in Computational Intelligence, Volume 347, Ed. Springer, pp 11-45, 2011.

**D21.** **C. Dobre**. A Simulation Model for Large Scale Distributed Systems, in Simulation in Computer Network Design and Modeling: Use and Analysis, Hussein Al-Bahadili (Ed.), Ed. IGI Global, 2011.

**D22.** **C. Dobre**. Monitoring and Controlling Grid Systems, in Grid Computing: Towards a Global Interconnected Infrastructure (Computer Communications and Networks), Nikolaos Preve (Ed.), Ed. Springer, ISBN: 978-0857296757, 2011.

**D23.** **C. Dobre**. A General Framework for the Modeling and Simulation of Grid and P2P Systems, in Handbook of Research on P2P and Grid Systems for Service-Oriented Computing: Models, Methodologies, and Applications, N. Antonopoulos, G. Exarchakos, M. Li, A. Liotta (Eds.), Ed. Information Science Reference (IGI Global), ISBN: 978-1615206865, pp. 657-686, 2010.

**D24.** F. Pop, C. Grigoras, A. Costan, **C. Dobre**, Valentin Cristea, *Tehnologii actuale in sistemele Grid*, Atelier de Lucru MEDIOGRID, Vol.1, ISBN: 973-713-090-1, Ed. Mediamira, pp. 85-103, Cluj-Napoca, Romania, 2006.

**Articole / studii in extenso, publicate în reviste din fluxul științific internațional principal:** a) în reviste de specialitate de circulație internațională recunoscute cotate ISI sau indexate în baze de date internaționale specifice domeniului, care fac un proces de selecție a revistelor pe baza unor criterii de performanță (Ris); b) în alte reviste de specialitate de circulație internațională (Rio); c) în reviste din țară recunoscute C.N.C.S.I.S. (Rns); d) în alte reviste de specialitate de circulație națională (Rno); b,c,d-inclusiv indexate în baze de date internaționale recunoscute.

Obs. – Grupe distincte, în ordinea de mai sus.

**Ris1.** D. G. Reina, R.-I. Ciobanu, S. Toral, **C. Dobre**, A multi-objective optimization of data dissemination in delay tolerant networks, in Expert Systems with Applications (ISSN: 0957-4174), Volume 57, pp. 178-191, September 2016. CCC:000376052200014, IF:2,24

**Ris2.** D. G. Reina, P. Ruiz, R.-I. Ciobanu, S. L. Toral, B. Dorronsoro, **C. Dobre**, A Survey on the Application of Evolutionary Algorithms for Mobile Multihop Ad Hoc Network Optimization Problems, in International Journal of Distributed Sensor Networks (ISSN: 1550-1329), Volume 2016 (2016), Article ID 2082496, 13 pages, 2016. WOS:000370745300001, IF: 0,67

**Ris3.** S. Toral, **C. Dobre**, B. Dorronsoro, M. Gunes, DG. Reina, Computational Intelligence in Wireless Sensor and Ad Hoc Networks, in International Journal of Distributed Sensor Networks (ISSN: 1550-1329), Volume 2016 (2016), Article ID 7049593, 2016. WOS:000374042300001, IF: 0,67

**Ris4.** F. Pop, R.-I. Ciobanu, **C. Dobre**, Adaptive Method to Support Social-based Mobile Networks Using a PageRank Approach, in Concurrency and Computation: Practice and Experience (ISSN: 1532-0634), Volume 27, Issue 8, pages 1900–1912, 10 June 2015 (DOI: 10.1002/cpe.3103). WOS:000353351800006 1,00

**Ris5.** M.-C. Nita, F. Pop , C. Voicu, **C. Dobre**, F. Xhafa, MOMTH: multi-objective scheduling algorithm of many tasks in Hadoop, in Cluster Computing (ISSN: 1386-7857), Vol. 18, Issue 3, pp 1011-1024, Sep. 2015 (DOI: 10.1007/s10586-015-0454-8). WOS:000361897200002, IF: 1,51

**Ris6.** R.-I. Ciobanu, **C. Dobre**, V. Cristea, F. Pop, F. Xhafa, SPRINT-SELF: Social-Based Routing and Selfish Node Detection in Opportunistic Networks, in Mobile Information Systems (MIS) (ISSN: 1574-017X), Accepted for publication 2013, Volume 2015 (2015), Article ID 596204 (DOI: 10.1155/2015/596204). WOS:000351601100001, IF: 0,95

**Ris7.** R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, V. Cristea, Interest-awareness in data dissemination for opportunistic networks, in Ad Hoc Networks (ISSN: 1570-870), Vol. 25, Part B, pp. 330–345, February 2015 (DOI: 10.1016/j.adhoc.2014.07.004). WOS:000347756600004, IF: 1,53

**Ris8.** F. Pop, **C. Dobre**, V. Cristea, N. Bessis, F. Xhafa, L. Barolli, Deadline Scheduling for Aperiodic Tasks in inter-Cloud Environments: a New Approach to Resource Management, in Journal of Supercomputing (ISSN: 0920-8542), Springer, 2014, Volume 71, Issue 5, pp 1754-1765, May 2015 (DOI: 10.1007/s11227-014-1285-8). WOS:000353786700010, IF: 0,86

- Ris9.** F. Pop, **C. Dobre**, V. Cristea, N. Bessis, F. Xhafa, L. Barolli, Reputation-guided evolutionary scheduling algorithm for independent tasks in inter-clouds environments, in Int. J. of Web and Grid Services (ISSN: 1741-1106), Vol.11, No.1, pp.4 - 20, 2015 (DOI: 10.1504/IJWGS.2015.067159). WOS:000351951500002, IF: 0,76
- Ris10.** F. Pop, **C. Dobre**, D. Comaneci, J. Kolodziej, Adaptive scheduling algorithm for media-optimized traffic management in software defined networks, in Computing (ISSN: 0010-485X), Springer (online), Vol. 98, Issue 1-2, pp. 147-168, Jan. 2016 (DOI: 10.1007/s00607-014-0406-9). WOS:000368104400008, IF: 0,59
- Ris11.** R.-I. Ciobanu, **C. Dobre**, M. Dascalu, S. Trausan-Matu, V. Cristea, SENSE: A Collaborative Selfish Node Detection and Incentive Mechanism for Opportunistic Networks, in Journal of Network and Computer Applications (JNCA) (ISSN: 1084-8045), Vol. 41, pp. 240–249, May 2014. WOS:000335629300022, IF: 2,23
- Ris12.** R.-I. Ciobanu, D. Reina, **C. Dobre**, S. Toral, P. Johnson, JDER: A history-based forwarding scheme for Delay Tolerant Networks using Jaccard Distance and Encountered Ration, in Journal of Network and Computer Applications (ISSN: 1084-8045), Vol. 40, pp. 279–291 (DOI: 10.1016/j.jnca.2013.09.012), April 2014. WOS:000334002900025, IF: 2,23
- Ris13.** **C. Dobre**, F. Xhafa, Intelligent Services for Big Data Science, in Future Generation Computer Systems (ISSN: 0167-739X), Special Issue: Big Data Science, Vol. 37, pp. 267–281 (DOI: 10.1016/j.future.2013.07.014), July 2014. WOS:000337931200026, IF: 2,79
- Ris14.** **C. Dobre**, F. Xhafa, Parallel Programming Paradigms and Frameworks in Big Data Era, in International Journal of Parallel Programming (ISSN: 0885-7458), Vol. 42, Issue 5, pp 710-738 (DOI: 10.1007/s10766-013-0272-7), October 2014. WOS:000337092000002, IF: 0,49
- Ris15.** R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, Interaction Predictability of Opportunistic Networks in Academic Environments, in Transactions on Emerging Telecommunications Technologies (ISSN: 2161-3915), Vol. 25, Issue 8, pp. 852–864, (DOI: 10.1002/ett.2692), August 2014. WOS:000341668000008, IF: 1,35
- Ris16.** R.-C. Marin, **C. Dobre**, F. Xhafa, A methodology for assessing the predictable behaviour of mobile users in wireless networks, in Concurrency and Computation: Practice and Experience (ISSN: 1532-0634), Vol. 26, Issue 5, 1215–1230 (DOI: 10.1002/cpe.3064), April 2014. WOS:000332983700014, IF: 1,00
- Ris17.** C. Fratila, **C. Dobre**, F. Pop, V. Cristea, A Transportation Control System for Urban Environments, in Journal of Internet Technology (JIT) (ISSN: 1607-9264), vol. 14, no. 3, pp. 425-441, 2013. WOS:000320291200008, IF: 0,44
- Ris18.** **C. Dobre**, Simulation analysis of data processing activities in Compact Muon Solenoid physics, in Simulation: Transactions of the Society for Modeling and Simulation International (SIAM) (ISSN: 0037-5497), 88(12), pp. 1438–1455, 2012. WOS:000310883000003, IF: 0,82
- Ris19.** A. Olteanu, F. Pop, **C. Dobre**, V. Cristea, A dynamic rescheduling algorithm for resource management in large scale dependable distributed systems, in Computers and Mathematics with Applications (CAMWA) (ISSN: 0898-1221), 63(9), pp. 1409-1423, 2012. WOS:000303700100007, IF: 1,70
- Ris20.** V. Cristea, C. Leordeanu, F. Pop, **C. Dobre**, E-Service Security, in Proceedings of the Romanian Academy (ISSN : 1454-9069), Series A, Vol.13, Number 2/2012, pp. 149–156, 2012. WOS:000305318700009, IF: 1,66
- Ris21.** F. Pop, **C. Dobre**, An Efficient PageRank Approach for Urban Traffic Optimization, in Mathematical Problems in Engineering (ISSN: 1024-123X), Volume 2012, Article# 465613, 9 pages, 2012. WOS:000307662600001, IF: 0,76
- Ris22.** I. C. Legrand, H. Newman, R. Voicu, C. Cirstoiu, C. Grigoras, **C. Dobre**, A. Muraru, A. Costan, M. Dediu, C. Stratan, MonALISA: An agent based, dynamic service system to monitor, control and optimize distributed systems, in Computer Physics Communications (ISSN: 0010-4655), Volume 180, Issue 12, pp. 2472-2498, December 2009. WOS:000273011500008, IF: 3,11
- Rio1.** C. Chilipirea, A.-C. Petre, **C. Dobre**, F. Pop, G. Suciu, A simulator for opportunistic networks, in Concurrency and Computation: Practice and Experience (ISSN: 1532-0634), First published: 29 March 2016 (DOI: 10.1002/cpe.3814). (indexare Wiley Online Library, Google Scholar)
- Rio2.** A. Vladutu, D. Comaneci, **C. Dobre**, Internet Traffic Classification Based on Flows Statistical Properties with Machine Learning, in International Journal of Network Management (ISSN: 1099-1190), Published online: 13 APR 2016 (DOI: 10.1002/nem.1929). (indexare Wiley Online Library, Google Scholar)
- Rio3.** C. Chilipirea, A.-C. Petre, **C. Dobre**, F. Pop, Enabling Mobile Cloud Wide Spread through an Evolutionary Market-based Approach, in IEEE Systems Journal (ISSN: 1932-8184), IEEE, Vol. PP, Issue 99, pp. 1-8, 2015. (indexare IEEE Xplore Digital Library)
- Rio4.** F. Pop, **C. Dobre**, B.-C. Mocanu, O.-M. Citoreanu, F. Xhafa, Trust models for efficient communication in Mobile Cloud Computing and their applications to e-Commerce, in Enterprise Information Systems (ISSN: 1751-7575), pp. 1–19, 2015. (indexare Taylor Francis Online, Google Scholar)
- Rio5.** A. Bourdema, C. X. Mavromoustakis, G. Mastorakis, J. J. P. C. Rodrigues, **C. Dobre**, Using Socio-Spatial Context in Mobile Cloud Offload Process for Energy Conservation in Wireless Devices, in IEEE Transactions

on Cloud Computing (ISSN: 2168-7161), Vol. PP, Issue: 99, pg. 1, Dec. 2015. (indexare IEEE Xplore Digital Library)

**Rio6.** V.-D. Stanciu, **C. Dobre**, V. Cristea, Context-Based Service For Intelligent Public Transportation Systems, in International Journal of Adaptive and Innovative Systems (ISSN: 1740-2107), Vol. 2, Issue 2, pg. 15, 2015. (indexare Inderscience Online, Google Scholar)

**Rio7.** C. Chilipirea, A.-C. Petre, **C. Dobre**, Social-based routing algorithm for energy preservation in mobile opportunistic networks, in Int. J. of Embedded Systems, Vol.6, No.1, pp.14 - 27, 2014 (DOI: 10.1504/IJES.2014.060922). (indexare Inderscience Online, Google Scholar)

**Rio8.** **C. Dobre**, A cluster-enhanced fault tolerant Peer-to-Peer System, in International Journal of Innovative Computing, Information and Control (IJICIC) (ISSN: 1349-4198), Vol. 10, No. 2, pp. 417-436, April 2014. (indexare Inderscience Online, Google Scholar)

**Rio9.** C. Chilipirea, A.-C. Petre, **C. Dobre**, Energy-Aware Social-based Routing in Opportunistic Networks, in International Journal of Embedded Systems (IJES) (ISSN: 1741-1068), Special Issue on Intelligent Technologies for Future Information Network Systems, Accepted for publication 2014. (indexare Inderscience Online, Google Scholar)

**Rio10.** R.-I. Ciobanu, **C. Dobre**, Opportunistic Networks: A Taxonomy of Data Dissemination Techniques, in International Journal of Virtual Communities and Social Networking (IJVCSN)(ISSN: 1942-9010), Volume 5, Issue 2, 16 pg., 2013 (DOI: 10.4018/jvcsn.2013040102). (indexare Inderscience Online, Google Scholar)

**Rio11.** R.-I. Ciobanu, **C. Dobre**, Social-Awareness in Opportunistic Networking, in Int. J. Intelligent Systems Technologies and Applications (IJISTA), (ISSN: 1740-8865), Special Issue on Green Communication and Computing, Vol. 12, No. 1, pp. 39-62, (DOI: 10.1504/IJISTA.2013.055095), 2013. (indexare Inderscience Online, Google Scholar)

**Rio12.** **C. Dobre**, F. Pop, V. Cristea, The EU-Services Directive: An eFramework to Optimize Public Administration, in International Journal of Distributed Systems and Technologies (IJDST), (ISSN: 1947-3532), Vol. 4, No. 3, pp. 1-16, July-Sept. 2013. (indexare Inderscience Online, Google Scholar)

**Rio13.** E. Burceanu, **C. Dobre**, V. Cristea, Adaptive Distributed Data Storage for Context-Aware Applications, in Journal of Telecommunications and Information Technology (ISSN: 1509-4553), Vol. 4/2013, pp. 58-69, 2013. (indexare Scopus, DOAJ, GoogleScholar)

**Rio14.** **C. Dobre**. Intelligent Lane Reservation System for Highway(s), in International Journal of Vehicular Technology, Vol. 2012, Article ID 604965, 13 pages, Hindawi Publishing Corporation, 2012. (indexare DOAJ, GoogleScholar)

**Rio15.** **C. Dobre**, MONARC: A Case Study on Simulation Analysis for LHC Activities, in World Academy of Science, Engineering and Technology (ISSN: 2010-376X), Issue 61, Article# 21, pp. 123-130, January 2012. (indexare DOAJ, GoogleScholar)

**Rio16.** A. Lavinia, **C. Dobre**, F. Pop, V. Cristea. A Failure Detection System for Large Scale Distributed Systems, in International Journal of Distributed Systems and Technologies (IJDST) (ISSN: 1947-3532), 2(3), pp. 64-87, 2011. (indexare DOAJ, GoogleScholar)

**Rio17.** A. Boteanu, **C. Dobre**. A Simulation Model for Fault Tolerance Evaluation, in U.P.B. Scientific Bulletin (ISSN: 1454-2331), Series C, Vol. 73, Iss. 1, pp. 13-26, 2011. (indexare DOAJ, GoogleScholar)

**Rio18.** V. Cristea, **C. Dobre**, A. Costan, F. Pop. Middleware and architectures for space-based and situated computing, in International Journal of Space-Based and Situated Computing (IJSSC), vol. 1, issue 1, pp. 43-58, 2011. (indexare Inderscience, DOAJ, GoogleScholar)

**Rio19.** **C. Dobre**, A. Marin. Automatic Data Migration e-System for Public Administration e-Services, in Scientific International Journal for Parallel and Distributed Computing, Scalable Computing: Practice and Experience (ISSN: 1895-1767), vol. 12, no. 1, pp. 51-61, 2011. (indexare DOAJ, GoogleScholar)

**Rio20.** V. Cristea, **C. Dobre**, F. Pop, C. Stratan, A. Costan, C. Leordeanu. A Dependability Layer for Large Scale Distributed Systems, in International Journal of Grid and Utility Computing (IJGUC) (ISSN: 1741-847X), 2(2), pp. 109-118, 2011. (indexare DOAJ, GoogleScholar)

**Rio21.** A. Szekeres, S. H. Baranga, **C. Dobre**, V. Cristea. A Keyword Search Algorithm for Structured Peer-to-Peer Networks, in International Journal of Grid and Utility Computing (IJGUC) (ISSN: 1741-847X), Special Issue on Advances in P2P Computing and Applications, 2(3), pp. 204-214, 2011. (indexare DOAJ, GoogleScholar)

**Rio22.** F. Pop, M.-V. Grigoras, C. Dobre, O. Achim, V. Cristea. Load-Balancing Metric for Service Dependability in Large Scale Distributed Environments, in Scalable Computing: Practice and Experience (SCPE) (ISSN: 1895-1767), 12(4), pp. 391–401, 2011. (indexare DOAJ, GoogleScholar)

**Rio23.** **C. Dobre**, F. Pop, V. Cristea, O.-M. Achim. A Virtualization-based Approach to Dependable Service Computing, in Scalable Computing: Practice and Experience (SCPE) (ISSN: 1895-1767), 12(3), pp. 339-352, 2011. (indexare DOAJ, GoogleScholar)

**Rio24.** A. Olteanu, F. Pop, **C. Dobre**, V. Cristea. Re-Scheduling and Error Recovering Algorithm for Distributed Environments, in U.P.B. Scientific Bulletin, Series C (ISSN: 1454-234x), 78(1), pp. 27-38, Ed. Politehnica Press, 2011. (indexare DOAJ, GoogleScholar)

**Rio25.** **C. Dobre**, F. Pop, V. Cristea. Simulation Framework for the Evaluation of Dependable Distributed Systems, in Scalable Computing: Practice and Experience, Scientific International Journal for Parallel and Distributed Computing (SCPE) (ISSN: 1097-2803), pp. 13-23, Vol. 10, Nr. 1/2009, 2009. (indexare DOAJ, GoogleScholar)

**Rio26.** **C. Dobre**, C. Stratan. MONARC Simulation Framework, in Buletinul Stiintific al Universitatii "Politehnica" din Timisoara, ROMANIA, Seria AUTOMATICA si CALCULATOARE, PERIODICA POLITECHNICA, Transactions on AUTOMATIC CONTROL and COMPUTER SCIENCE (ISSN: 1224-600X), 49(63), pp. 35-42, Ed. Politehnica Timisoara, 2004. (indexare DOAJ, GoogleScholar)

**Publicații in extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate:** a) internaționale recunoscute (cu ISSN sau ISBN) din țară și din străinătate (Vi) și b) naționale (Vn), inclusiv cotate ISI sau indexate în baze de date internaționale.

**Vi1.** G. Suciu, V. Suciu, R. Gheorghe, **C. Dobre**, F. Pop, A. Castiglione, Analysis of Network Management and Monitoring Using Cloud Computing, in Proc. of 7th International Symposium on Intelligence Computation and Applications (ISICA 2015), Book Series: Communications in Computer and Information Science, vol. 575, pp. 343-352, Guangzhou, China, Nov. 2015. WOS:000373069100025

**Vi2.** R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, V. Cristea, C. X. Mavromoustakis, G. Mastorakis, Opportunistic Dissemination using Context-Based Data Aggregation over Interest Spaces, in Proc. of IEEE International Conference on Communications (ICC 2015), London, UK, pp. 1219-1225, June 2015. WOS:000371708101070

**Vi3.** Y. Kryftis, C. X. Mavromoustakis, G. Mastorakis, E. Pallis, J. M. Batalla, J. J. P. C. Rodrigues, **C. Dobre**, G. Kormentzas, Resource Usage Prediction Algorithms for Optimal Selection of Multimedia Content Delivery Methods, in Proc. of IEEE International Conference on Communications (ICC 2015), London, UK, pp. 5903-5909, June 2015. WOS:000371708106021

**Vi4.** F. Pop, O.-M. Citoreanu, **C. Dobre**, V. Cristea, Resource Trust Management in Auto-Adaptive Overlay Network for Mobile Cloud Computing, in Proc. of 13th International Symposium on Parallel and Distributed Computing (ISPDC 2014), Porquerolles Island, Cote d'Azur, France, pp. 162-169, June 2014. WOS:000360933900023

**Vi5.** R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, V. Cristea, C. X. Mavromoustakis, ONSIDE: Socially-Aware and Interest-Based Dissemination in Opportunistic Networks, in Proc. of 6th IEEE/IFIP International Workshop on Management of the Future Internet (ManFI 2014), IEEE/IFIP Network Operations and Management Symposium (NOMS 2014), Krakow, Poland, pp.1-6, May 2014. WOS:000356862300159

**Vi6.** V.-D. Stanciu, **C. Dobre**, V. Cristea, Context-Based Service For Intelligent Public Transportation Systems, in Proc. of International Workshop on Autonomic Distributed Systems (ADiS 2014), 8th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS 2014), Birmingham, UK, pp. 353-358, July 2014. WOS:000352618900051

**Vi7.** C. Chilipirea, A.-C. Petre, **C. Dobre**, Energy-Aware Social-based Routing in Opportunistic Networks, in Proc. of 2013 27th International Conference on Advanced Information Networking and Applications Workshops (AINAW'13), Barcelona, Spain, pp. 791-796, 2013. WOS:000327181600129

**Vi8.** C. Chilipirea, A.-C. Petre, **C. Dobre**, Predicting Encounters in Opportunistic Networks using Gaussian Process, in Proc. of 2013 19th International Conference on Control Systems and Computer Science (CSCS 2013), Bucharest, Romania, pp. 99-105, 2013. WOS:000328493800015

**Vi9.** **C. Dobre**, A Platform to Support Context-Aware Mobile Applications, in Proc. of 2013 19th International Conference on Control Systems and Computer Science (CSCS 2013), Bucharest, Romania, pp. 121-128, 2013. WOS:000328493800018

**Vi10.** R.-I. Ciobanu, **C. Dobre**, M. Dascalu, S. Trausan-Matu, V. Cristea, Collaborative Selfish Node Detection with an Incentive Mechanism for Opportunistic Networks, in Proc. of 5th IFIP/IEEE International Workshop on Management of the Future Internet (IFIP/IEEE ManFI 2013), IFIP/IEEE International Symposium on Integrated Network Management (IM 2013), Ghent, Belgium, pp. 1161-1166, May 2013. WOS:000327159900191

**Vi11.** R.-I. Ciobanu, **C. Dobre**, V. Cristea, Reducing Congestion for Routing Algorithms in Opportunistic Networks with Socially-Aware Node Behavior Prediction, in Proc. of 2013 IEEE 27th International Conference on Advanced Information Networking and Applications (AINA'13), Barcelona, Spain, pp. 554-561, 2013. WOS:000324398900073

**Vi12.** F. Pop, **C. Dobre**, V. Cristea, N. Bessis, Scheduling of Sporadic Tasks with Deadline Constraints in Cloud Environments, in Proc. of 2013 IEEE 27th International Conference on Advanced Information Networking and Applications (AINA'13), Barcelona, Spain, pp. 764-771, 2013. WOS:000324398900101

- Vi13.** M.-C. Nita, C. Chilipirea, **C. Dobre**, F. Pop, A SLA-Based Method for Big-Data Transfers with Multi-Criteria Optimization Constraints for IaaS, in Proc. of 11th International Conference of Networking in Education and Research (RoEduNet 2013), Sinaia, Romania, pp. 105-110, 2013. WOS:000320558100017  
WOS:000320558100017
- Vi14.** R. I. Ciobanu, **C. Dobre**, V. Cristea, Social aspects to support opportunistic networks in an academic environment, in Proc. of 11th international conference on Ad-hoc, Mobile, and Wireless Networks (ADHOC-NOW'12), Xiang-Yang Li, Symeon Papavassiliou, and Stefan Ruehrup (Eds.). Springer-Verlag, Berlin, Heidelberg, pp. 69-82, 2012. BDI: ACM Digital Library. WOS:000325935000006
- Vi15.** **C. Dobre**, A. Szekeres, F. Pop, V. Cristea, F. Xhafa. Intelligent Traffic Lights to Reduce Vehicle Emissions, in Proc. of 26th European Conference on Modelling and Simulation (ECMS 2012), Klaus G. Troitzsch, Michael Mohring, Ulf Lotzmann (Eds.), Koblenz, Germany, pp. 504-511, 2012. WOS:000319084600074
- Vi16.** C. Bancu, M. Dagadita, M. Dascalu, **C. Dobre**, S. Trausan-Matu, A. M. Florea, ARSYS - Article Recommender System, in Proc. of 14th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2012), Timisoara, Romania, September 2012. WOS:000317189000049
- Vi17.** **C. Dobre**, Using Intelligent Traffic Lights to Reduce Vehicle Emissions, in International Journal of Innovative Computing, Information and Control (IJICIC) (ISSN: 1349-4198)(2010 IF = 1.667), Volume 8, Number 9, pp. 6283-6302, September 2012.
- Vi18.** A.M. Alberti, W. Moreira, R. da R. Righi, F. J. Pereira Neto, **C. Dobre**, D. Singh, Towards An Opportunistic, Socially-Driven, Self-Organizing, Cloud Networking Architecture with NovaGenesis, in Proc. of 2nd International Workshop on Emerging Software as a Service and Analytics (ESaaSA 2015), 5th International Conference on Cloud Computing and Services Science (CLOSER 2015), Lisbon, Portugal, May 2015 (Runner Up Award). (indexare SCOPUS, DOAJ, GoogleScholar)
- Vi19.** C. X. Mavromoustakis, G. Mastorakis, C. Mysirlidis, T. Dagiuklas, I. Politis, **C. Dobre**, K. Papanikolaou, E. Pallis, On the Perceived Quality Evaluation of Opportunistic Mobile P2P Scalable Video Streaming, in Proc. of 11th International Wireless Communications and Mobile Computing Conference (IWCMC 2015), Dubrovnik, Croatia, pp. 1515-1519, August 2015. (indexare IEEE Xplore Digital Library)
- Vi20.** G. Suciu, **C. Dobre**, V. Suciu, G. Todoran, A. Vulpe, A. Apostu, Cloud Computing for Extracting Price Knowledge from Big Data, in Proc. of 8th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2015), ADiS 2015, International Workshop on Autonomic Distributed Systems (ADiS-2015), Blumenau, Brazil, pp. 314-317, July 2015. (indexare IEEE Xplore Digital Library)
- Vi21.** M. Mocanu, V. Cristea, C. Negru, F. Pop, V. Ciobanu, **C. Dobre**, Cloud-Based Architecture for Farm Management, in Proc. of 20th International Conference on Control Systems and Computer Science (CSCS20), Bucharest, Romania, pp. 814-819, May 2015. (indexare IEEE Xplore Digital Library)
- Vi22.** G. Suciu, V. Suciu, **C. Dobre**, C. Chilipirea, Tele-Monitoring System for Water and Underwater Environments using Cloud and Big Data Systems, in Proc. of 20th International Conference on Control Systems and Computer Science (CSCS20), Bucharest, Romania, pp. 809-813, May 2015. (indexare IEEE Xplore Digital Library)
- Vi23.** C. Chilipirea, A.-C. Petre, **C. Dobre**, F. Pop, G. Suciu, A Simulator for Analysis of Opportunistic Routing Algorithms, in Proc. of 14th International Symposium on Parallel and Distributed Computing (ISPDC 2015), Limassol, Cyprus, pp. 27-36, June 2015. (indexare IEEE Xplore Digital Library)
- Vi24.** B. Mocanu, F. Pop, A. Mihaita (Mocanu), **C. Dobre**, V. Cristea, SPIDER: A Bio-Inspired Structured Peer-to-Peer Overlay for Data Dissemination, in Proc. of 3PGCIC, 2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), Krakow, Poland, pp. 291-295, Nov. 2015. (indexare IEEE Xplore Digital Library)
- Vi25.** A. Mihaita (Mocanu), **C. Dobre**, B. Mocanu, F. Pop, V. Cristea, Analysis of security approaches for vehicular ad-hoc networks, in Proc. of 3PGCIC, 2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), Krakow, Poland, pp. 304-309, Nov. 2015. (indexare IEEE Xplore Digital Library)
- Vi26.** C. Chilipirea, A.-C. Petre, **C. Dobre**, M. van Steen, Filters for Wi-Fi Generated Crowd Movement Data, in Proc. of 3PGCIC, 2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), Krakow, Poland, pp. 285-290, Nov. 2015. (indexare IEEE Xplore Digital Library)
- Vi27.** C. Chilipirea, A.-C. Petre, **C. Dobre**, M. van Steen, Proximity Graphs for Crowd Movement Sensors, in Proc. of 3PGCIC, 2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), Krakow, Poland, pp. 310-314, Nov. 2015. (indexare IEEE Xplore Digital Library)
- Vi28.** C. Pop, R.-I. Ciobanu, R.-C. Marin, **C. Dobre**, Data Dissemination in Vehicular Networks using Context Spaces, in Proc. of 2015 IEEE Globecom Workshops (GC Wkshps), San Diego, CA, pp. 1-7, Dec. 2015. (indexare IEEE Xplore Digital Library)
- Vi29.** G. Suciu, V. Suciu, R. Gheorghe, **C. Dobre**, F. Pop, A. Castiglione, Analysis of Network Management and Monitoring Using Cloud Computing, in Proc. of 7th International Symposium ISICA 2015, Guangzhou,

China, (Communications in Computer and Information Science, vol. 575, pp. 343-352), Nov. 2015. (indexare IEEE Xplore Digital Library)

**Vi30.** M. Ciocan, **C. Dobre**, V. Cristea, C. X. Mavromoustakis, G. Mastorakis, Analysis of Vehicular Storage and Dissemination Services based on Floating Content, in Proc. of International Workshop on Enhanced Living EnvironMENTS (ELEMENT 2014), 6th International Conference on Mobile Networks and Management (MONAMI 2014), Wuerzburg, Germany, pp. 387-400, September 2014. (indexare Springer Link, Lecture Notes in Computer Science)

**Vi31.** N.-V. Ciobanu, D.-G. Comaneci, **C. Dobre**, C. X. Mavromoustakis, G. Mastorakis, OpenMobs: Mobile Broadband Internet Connection Sharing, in Proc. of 6th International Conference on Mobile Networks and Management (MONAMI 2014), Wuerzburg, Germany, pp. 244-258, September 2014. (indexare Springer Link, Lecture Notes in Computer Science)

**Vi32.** C. X. Mavromoustakis, A. Andreou, G. Mastorakis, A. Bourdema, J. M. Batalla, **C. Dobre**, On the Performance Evaluation of a Novel Offloadingbased Energy Conservation Mechanism for Wireless Devices, in Proc. of 6th International Conference on Mobile Networks and Management (MONAMI 2014), Wuerzburg, Germany, pp 179-191, September 2014. (indexare Springer Link, Lecture Notes in Computer Science)

**Vi33.** K. Papanikolaou, C. X. Mavromoustakis, G. Mastorakis, A. Bourdema, **C. Dobre**, Energy Consumption Optimization using Social Interaction in the Mobile Cloud, in Proc. of International Workshop on Enhanced Living EnvironMENTS (ELEMENT 2014), 6th International Conference on Mobile Networks and Management (MONAMI 2014), Wuerzburg, Germany, pp. 431-445, September 2014. (indexare Springer Link, Lecture Notes in Computer Science)

**Vi34.** C. Voicu, F. Pop, **C. Dobre**, F. Xhafa, MOMC: Multi-objective and Multi-constrained Scheduling Algorithm of Many Tasks in Hadoop, P2P, Parallel, Grid, Cloud and Internet Computing (3PGCIC), 2014 Ninth International Conference on, Guangdong, China, pp. 89-96, Nov. 2014. (DOI: 10.1109/3PGCIC.2014.40) (indexare IEEE Xplore Digital Library)

**Vi35.** R.-C. Marin, **C. Dobre**, Reaching for the clouds: contextually enhancing smartphones for energy efficiency, in Proc. of 2nd ACM workshop on High performance mobile opportunistic systems (HP-MOSys'13), 16th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (ACM MSWIM 2013), Barcelona, Spain, pp. 31-37, November 2013. (DOI: 10.1145/2507908.2507912) (indexare ACM Digital Library)

**Vi36.** D.G. Reina, R.-I. Ciobanu, S.M. Toral, **C. Dobre**, F. Barrero, Analysis of Probabilistic Forwarding in Opportunistic Networks Using the Percolation Theory. In 6th International Conference Developments in eSystems Engineering (DeSE 2013). IEEE, Abu Dhabi, UAE, pp. 51 - 56, December 2013. (DOI: 10.1109/DeSE.2013.18) (indexare IEEE Xplore Digital Library)

**Vi37.** A. Asandei, **C. Dobre**, M. Popovici, Social-Based Routing with Congestion Avoidance in Opportunistic Networks, in Proc. of 12th International Conference on Ad Hoc Networks and Wireless (ADHOC-NOW 2013), Wroclaw, Poland, in Lecture Notes in Computer Science, Springer, 7960, pp. 13-25, July 2013. (DOI: 10.1007/978-3-642-39247-4\_2) (indexare Springer Link, Lecture Notes in Computer Science)

**Vi38.** R.-I. Ciobanu, **C. Dobre**, V. Cristea, SPRINT: Social Prediction-Based Opportunistic Routing, in Proc. of 7th IEEE WoWMoM Workshop on Autonomic and Opportunistic Communications (IEEE AOC 2013), IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2013), Madrid, Spain, pp. 1-7, (DOI: 10.1109/WoWMoM.2013.6583442) May 2013. (indexare IEEE Xplore Digital Library)

**Vi39.** D. Urda, **C. Dobre**, F. Pop, Storing location-aware data in mobile distributed systems, in Proc. of 12th International Symposium on Parallel and Distributed Computing (ISPDC 2013), Bucharest, Romania, pp. 135-142, (DOI: 10.1109/ISPDC.2013.26) June 2013. (indexare IEEE Xplore Digital Library)

**Vi40.** E. Burceanu, **C. Dobre**, V. Cristea, A. Costan, G. Antoniu, Distributed Data Storage in Support for Context-Aware Applications, in Proc. of 12th International Symposium on Parallel and Distributed Computing (ISPDC 2013), Bucharest, Romania, pp. 93-100, June 2013. (indexare IEEE Xplore Digital Library)

**Vi41.** E. Asimakopoulou, S. Sotiriadis, N. Bessis, **C. Dobre**, V. Cristea, Centralized Micro-Clouds: An infrastructure For Service Distribution In Collaborative Smart Devices, in Proc. of 4th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2013), Procedia Computer Science Volume 21, Elsevier (Ed.), Niagara Falls, Ontario, Canada, pp. 83-90, (DOI: 10.1016/j.procs.2013.09.013) 2013. (indexare ScienceDirect, Google Scholar)

**Vi42.** F. Pop, **C. Dobre**, C. Negru, V. Cristea. Re-scheduling Service for Distributed Systems, in Advances in Intelligent Control Systems and Computer Science, Advances in Intelligent Systems and Computing, Vol. 187, pp. 423-437, 2013.DOI: 10.1007/978-3-642-32548-9\_30 (INSPEC, published by Springer)

**Vi43.** R.I. Ciobanu, **C. Dobre**, V. Cristea. Social aspects to support opportunistic networks in an academic environment, in Proc. of 11th international conference on Ad-hoc, Mobile, and Wireless Networks (ADHOC-NOW'12), Xiang-Yang Li, Symeon Papavassiliou, and Stefan Ruehrup (Eds.). Springer-Verlag, Berlin, Heidelberg, pp. 69-82, 2012. (ACM, INSPEC, published by ACM and Springer)

- Vi44.** C. Dobre, A. Ichimescu, V. Cristea. Adaptive Traffic Optimization, in Proc. of Sixth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS), Palermo, Italy, pp. 761-766, July 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi45.** C. Dobre, V. Cristea, L. Iftode. ILRSR: Intelligent Lane Reservation System for Highway(s), in Proc. of Sixth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS), Palermo, Italy, pp. 747-754, July 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi46.** C. Dobre, A. Szekeres, F. Pop, V. Cristea, F. Xhafa. Intelligent Traffic Lights to Reduce Vehicle Emissions, in Proc. of 26th European Conference on Modelling and Simulation (ECMS 2012), Klaus G. Troitzsch, Michael Mohring, Ulf Lotzmann (Eds.), Koblenz, Germany, pp. 504-511, 2012. (published by European Modeling Society)
- Vi47.** V. Ciobanu, D. Popescu, C. Dobre, F. Pop, V. Cristea. The EU-Services Directive: An e-Framework to optimize public administration, in Proc. of Third International Conference on Emerging Intelligent Data and Web Technologies (EIDWT-2012), Bucharest, Romania, pp. 336-341, September 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi48.** R.-C. Marin, C. Dobre, F. Xhafa. Exploring Predictability in Mobile Interaction, in Proc. of Third International Conference on Emerging Intelligent Data and Web Technologies (EIDWT-2012), Bucharest, Romania, pp. 133-139, September 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society) [BEST PAPER AWARD]
- Vi49.** C. Fratila, C. Dobre, F. Pop, V. Cristea. A Transportation Control System for Urban Environments, in Proc. of Third International Conference on Emerging Intelligent Data and Web Technologies (EIDWT-2012), Bucharest, Romania, pp. 117-124, September 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi50.** R.I. Ciobanu, C. Dobre. Predicting encounters in opportunistic networks, in Proc. of 1st ACM workshop on High performance mobile opportunistic systems (HP-MOSys '12), 15th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (ACM MSWIM 2012), Paphos, Cyprus Island, pp. 9-14, October 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi51.** A. Asandei, C. Dobre, P. Johnson. An Analysis of Techniques for Opportunistic Networking, in Proc. of IEEE International Conference on Intelligent Computer Communication and Processing (ICCP-2012), Cluj-Napoca, Romania, pp. 341-348, 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi52.** R.I. Ciobanu, C. Dobre, V. Cristea, D. Al-Jumeily. Social Aspects for Opportunistic Communication, in Proc. of 11th International Symposium on Parallel and Distributed Computing (ISPDC 2012), Munich, Germany, pp. 251-258, 2012. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi53.** M. Popovici, C. Dobre. A game-theoretic approach to cooperation in multi-agent systems, in Proc. of 2nd International Conference on Web Intelligence, Mining and Semantics (WIMS '12). Craiova, Romania, Article 54, 4 pages, 2012. (INSPEC, published by ACM)
- Vi54.** C. Giurale, L. Negreanu, M. Popovici, M. Muraru, A. Agache, C. Dobre. A modeling method and declarative language for temporal reasoning based on fluid qualities, in Proc. of 19th International Conference on Conceptual Structures (ICCS 2011), Derby, UK, pp. 215–228, July 2011. WOS:000306628900016 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi55.** C. Dobre, C. Fratila, L. Iftode. An approach to Evaluating Usability of VANET Applications, in Proc. of Modeling and Evaluating Networked CyPhy Systems (CyPhy Workshop), 7th International Wireless Communications and Mobile Computing Conference (IWCMC 2011), Istanbul, Turkey, pp. 801-807, July 2011. WOS:000300570200134 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi56.** V.-A. Dragoi, C. Dobre. A Model for Traffic Control in Urban Environments, in Proc. of Emergency management (EMCCP Workshop), 7th International Wireless Communications and Mobile Computing Conference (IWCMC 2011), Istanbul, Turkey, pp. 2139-2144, July 2011. WOS:000300570200353 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi57.** C. Dobre. Context-Aware Platform for Integrated Mobile Services, in Proc. of International Workshop on Services for Large Scale Distributed Systems (SeDIS 2011), 2nd International Conference on Emerging Intelligent Data and Web Technologies (EIDWT 2011), Tirana, Albania, pp. 198-203, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi58.** S. Mazilu, M. Teler, C. Dobre. Securing Vehicular Networks based on Data-Trust Computation, in Proc. of 6th Intl. Conf. on P2P, Parallel, Grid, Cloud, and Internet Computing (3PGCIC 2011), Barcelona, Spain, pp. 51-58, October 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi59.** C. Dobre. CAPIM: A Platform for Context-Aware Computing, in Proc. of 2nd Intl. Workshop on Middleware for Large Scale Distributed Systems (MiDiS-2011), 6th Intl. Conf. on P2P, Parallel, Grid, Cloud, and Internet Computing (3PGCIC 2011), Barcelona, Spain, pp. 266-272, October 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi60.** C. Dobre, V. Cristea. Simulation Analysis of CMS Data Replication and Production Activities, in Proc. of 4th International workshop on simulation and modelling of engineering & computational systems (SMECS

- 2011), 6th Intl. Conf. on P2P, Parallel, Grid, Cloud, and Internet Computing (3PGCIC 2011), Barcelona, Spain, pp. 372-377, October 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi61.** R. Voicu, I. Legrand, **C. Dobre**. A Monitoring Framework for Large Scale Networks, in Proc. of IEEE 7th International Conference on Intelligent Computer Communication and Processing (ICCP 2011), Cluj-Napoca, Romania, pp. 429-432, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi62.** C. Dobre, F. Manea, V. Cristea. CAPIM: A Context-Aware Platform using Integrated Mobile Services, in Proc. of IEEE 7th International Conference on Intelligent Computer Communication and Processing (ICCP 2011), Cluj-Napoca, Romania, pp. 533-540, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi63.** F. Pop, A. Arcalians, **C. Dobre**, V. Cristea. Enhanced Security for Monitoring Services in Large Scale Distributed Systems, in Proc. of IEEE 7th International Conference on Intelligent Computer Communication and Processing (ICCP 2011), Cluj-Napoca, Romania, pp. 549-556, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi64.** R.-I. Ciobanu, **C. Dobre**, V. Cristea. A Data Dissemination Algorithm for Opportunistic Networks, in Proc. of 13th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2011), Timisoara, Romania, pp. 299-305, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi65.** D.-G. Comaneci, **C. Dobre**. Electronic ID: Services and Applications for Context-Aware Integrated Mobile Services, in Proc. of Development in e-Systems Engineering (DeSE 2011), Dubai, UAE, pp. 502 - 507, December 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi66.** C. Dobre, R. Voicu, I. Legrand. Monitoring Large Scale Network Topologies, in Proc. of 6th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS 2011), Prague, Czech Republic, pp. 218-222, September 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi67.** C. Grosu, E.-D. Tirsa, **C. Dobre**, V. Cristea, M. I. Andreica. Scalable Chord-based, Cluster-enhanced Peer-to-Peer Architecture supporting Range Queries, in Proc. of 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011), Cluj-Napoca, Romania, pp. 178-185, July 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi68.** M. Dascalu, **C. Dobre**, S. Trausan-Matu, V. Cristea. Beyond Traditional NLP: A Distributed Solution for Optimizing Chat Processing, in Proc. of 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011), Cluj-Napoca, Romania, pp. 133-138, July 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi69.** M. Popovici, C. Giumale, L. Negreanu, A. Agache, M. Muraru, **C. Dobre**. Integration of a Declarative Language based on Fluid Qualities in a Service-Oriented Environment, in Proc. of 14th IASTED Conference on Artificial Intelligence and Soft Computing (ASC 2011), Crete, Greece, June 2011. (INSPEC, published by IASTED Society)
- Vi70.** M. Popovici, M. Muraru, A. Agache, L. Negreanu, C. Giumale, **C. Dobre**. An ontology-based dynamic service composition framework for intelligent houses, in Proc. of 10th International Symposium on Autonomous Decentralized Systems (ISADS 2011), Kobe-Tokyo, Japan, pp. 177–184, June 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi71.** S. Nour, R. Negru, F. Xhafa, F. Pop, **C. Dobre**, V. Cristea. Middleware for data sensing and processing in VANETs, in Proc. of International Workshop on Services for Large Scale Distributed Systems (SeDIS 2011), 2nd International Conference on Emerging Intelligent Data and Web Technologies (EIDWT 2011), Tirana, Albania, pp. 42-48, 2011. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi72.** F. Pop, **C. Dobre**, D. Popescu, V. Ciobanu, V. Cristea. Digital Certificate Management for Document Workflows in e-Government Services, in Proc. of 9th IFIP WG 8.5 international conference on Electronic government (EGOV'10), Maria A. Wimmer, Jean-Loup Chappelet, Marijn Janssen, and Hans J. Scholl (Eds.). Springer-Verlag, Berlin, Heidelberg, pp. 363-374, 2010. WOS:000286404000031 (ISI Proc. – SCI, Springer, INSPEC, published by Springer)
- Vi73.** C. Dobre, F. Constantin, F. Pop, V. Cristea. A Security Simulation Model for Large Scale Distributed Systems, in Proc. of 24th annual European Simulation and Modelling Conference (ESM'2010), Hasselt, Belgia, pp. 45-51, 25-27 Octombrie 2010. WOS:000305812900007 (ISI Proc. – SCI, published by Eurosis)
- Vi74.** C. Dobre, F. Pop, V. Cristea. A fault-tolerant approach to storing objects in distributed systems, in Proc. of International Conference on P2P, Paralel, Grid, Cloud and Internet Computing (3PGCIC 2010), Fukuoka, Japan, pp. 1-8, November 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society) [BEST PAPER AWARD]
- Vi75.** B. Eremia, **C. Dobre**, F. Pop, A. Costan, V. Cristea. Simulation model and instrument to evaluate replication techniques, in Proc. of Third International Workshop on Simulation and Modelling of Emergent Computational Systems (SMECS 2010), International Conference on P2P, Paralel, Grid, Cloud and Internet Computing (3PGCIC 2010), Fukuoka, Japan, pp. 541-547, November 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)

- Vi76.** A. Szekeres, S. H. Baranga, **C. Dobre**, V. Cristea. A Keyword Search Algorithm for Structured Peer-to-Peer Networks, in Proc. of 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), Timisoara, Romania, pp. 253-261, September 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi77.** C. Gosman, **C. Dobre**, V. Cristea. A Security Protocol for Vehicular Distributed Systems, in Proc. of 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), Timisoara, Romania, pp. 321-330, September 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi78.** A. Costan, F. Pop, **C. Dobre**, V. Cristea. A Workflow Management Platform for Scientific Applications in Grid Environments, in Proc. of 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), Timisoara, Romania, pp. 261-269, Septembrie 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi79.** A. Marin, **C. Dobre**, D. Popescu, V. Cristea. e-System for Automatic Data Migration, in Proc. of 1st Workshop on Software Services (WoSS), 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), Timisoara, Romania, pp. 479-485, September 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi80.** A. Marin, I. Constantinescu, **C. Dobre**, D. Boldeanu, V. Cristea. e-System for Public Administration Reporting Services, in Proc. of 2010 Developments in E-systems Engineering (DESE 2010), London, UK, pp. 249-253, September 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi81.** A. Boteanu, **C. Dobre**, F. Pop, V. Cristea. Simulator for Fault Tolerance in Large Scale Distributed Systems, in Proc. of 2010 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP 2010), Cluj-Napoca, Romania, pp. 443-450, August 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi82.** G.-C. Serban, A.-D. Dumitru, A. Marinescu, **C. Dobre**, V. Cristea. Routing Protocol for Urban Mobile Networks based on Geographical Location, in Proc. of 2010 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP 2010), Cluj-Napoca, Romania, pp. 479-483, August 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi83.** A. Costan, **C. Dobre**, F. Pop, C. Leordeanu, V. Cristea. A Fault Tolerance Approach for Distributed Systems Using Monitoring Based Replication, in Proc. of 2010 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP 2010), Cluj-Napoca, Romania, pp. 451-458, August 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi84.** A. Olteanu, F. Pop, **C. Dobre**, V. Cristea. An adaptive scheduling approach in distributed systems, in Proc. of 2010 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP 2010), Cluj-Napoca, Romania, pp. 435-442, August 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi85.** M. Istin, A. Visan, F. Pop, **C. Dobre**, V. Cristea. Near-Optimal Scheduling Based on Immune Algorithms in Distributed Environments, in Proc. of Fourth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2010), Krakow, Poland, pp. 439-444, February 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi86.** A. Lavinia, **C. Dobre**, F. Pop, V. Cristea. A Failure Detection System for Large Scale Distributed Systems, in Proc. of Fourth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2010), Krakow, Poland, pp. 482-489, February 2010. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi87.** F. Pop, **C. Dobre**, C. Stratan, A. Costan, V. Cristea. Dynamic Meta-Scheduling Architecture based on Monitoring in Distributed Systems, in Proc. of Third International Workshop on P2P, Parallel, Grid and Internet Computing (3PGIC-2009), Third International Conference on Complex, Intelligent and Software Intensive System (CISIS'09), Fukuoka, Japan, pp. 388 - 395, March 2009. WOS:000272961700052 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi88.** F. Pop, A. Costan, **C. Dobre**, C. Stratan, V. Cristea. Monitoring of Complex Applications Execution in Distributed Dependable Systems, in Proc. of 8th International Symposium on Parallel and Distributed Computing (ISPDC'09), Lisbon, Portugal, pp. 241-244, 2009. WOS:000275741200031 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi89.** **C. Dobre**, F. Pop, V. Cristea. A Simulation Model for Evaluating Distributed Systems Dependability, in Proc. of 23rd annual European Simulation and Modelling Conference (ESM'2009), Leicester, United Kingdom, pp. 62-69, October 2009. WOS:000280117100010 (ISI Proc. – SCI, published by Eurosis)
- Vi90.** F. Pop, **C. Dobre**, V. Cristea. Genetic Algorithm for DAG Scheduling in Grid Environments, in Proc. of IEEE International Conference on Intelligent Computer Communication and Processing (ICCP 2009), Cluj-Napoca, Romania, pp. 299-307, August 2009. WOS:000277143300051 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)

- Vi91.** A. Gainaru, **C. Dobre**, V. Cristea. A Realistic Mobility Model based on Social Networks for the Simulation of VANETs, in Proc. of 2009 IEEE 69th Vehicular Technology Conference (VTC2009-Spring), Barcelona, Spain, pp. 1-5, April 2009. WOS:000273169201030 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi92.** **C. Dobre**, F. Pop, V. Cristea. Towards Scalable Simulation of Large Scale Distributed Systems, in Proc. of International Conference on Network-Based Information Systems (NBiS 2009), Indianapolis, IN, USA, pp. 103-108, August 2009. WOS:000277210700016 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi93.** **C. Dobre**, F. Pop, V. Cristea. New Trends in Large Scale Distributed Systems Simulation, in Proc. of International Conference on Parallel Processing Workshops (ICPPW'09), Second International Workshop on Simulation and Modelling in Emergent Computational Systems (SMECS-2009), Vienna, Austria, pp. 182-189, 2009. WOS:000289915300026 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi94.** A. Marin, C. Vlaicu, A. Vita, **C. Dobre**, V. Cristea. An eFramework to optimize public administration services, in Proc. of 2009 Second International Conference on Developments in eSystems Engineering (DeSE 2009), Abu Dhabi, UAE, pp. 233-239, December 2009. WOS:000289878500035 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi95.** M. Nastase, **C. Dobre**, F. Pop, V. Cristea. Fault Tolerance using a Front-End Service for Large Scale Distributed Systems, in Proc. of 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2009), Timisoara, Romania, pp. 229-236, September 2009. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi96.** M. Ion, F. Pop, **C. Dobre**, V. Cristea. Dynamic Resources Allocation in Grid Enviroments, in Proc. of 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2009), Timisoara, Romania, pp. 213-220, September 2009. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi97.** F. Pop, **C. Dobre**, V. Cristea. Decentralized Dynamic Resource Allocation for Workflows in Grid Environments, in Proc. of Workshop on Workflow and Process Management (WfPM'08), 10th International Symposium on Symbolic and Numeric Algorithms (SYNASC'08), Timisoara, Romania, pp. 557-563, September 2008. WOS:000274363300090 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi98.** F. Pop, **C. Dobre**, V. Cristea. Performance Analysis of Grid DAG Scheduling Algorithms using MONARC Simulation Tool, in Proc. of 7th International Symposium on Parallel and Distributed Computing (ISPDC'08), Krakow, Polonia, pp. 131-138, July 2008. WOS:000263137300018 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi99.** A. Costan, **C. Dobre**, V. Cristea, R. Voicu. A Monitoring Architecture for High-Speed Networks in Large Scale Distributed Collaborations, in Proc. of 7th International Symposium on Parallel and Distributed Computing (ISPDC'08), Krakow, Polonia, pp. 409 – 416, July 2008. WOS:000263137300052 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi100.** **C. Dobre**, C. Stratan, V. Cristea. Realistic simulation of large scale distributed systems using monitoring, in Proc. of 7th International Symposium on Parallel and Distributed Computing (ISPDC'08), Krakow, Polonia, pp. 434–438, July 2008. WOS:000263137300056 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi101.** F. Pop, **C. Dobre**, V. Cristea. Evaluation of Multi-Objective Decentralized Scheduling for Applications in Grid Environment, in Proc. of 2008 IEEE 4th International Conference on Intelligent Computer Communication and Processing (ICCP 2008), Cluj-Napoca, Romania, pp. 231-238, August 2008. WOS:000261519200031 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi102.** **C. Dobre**, F. Pop, V. Cristea. A Simulation Framework for Dependable Distributed Systems, in Proc. of First International Workshop on Simulation and Modeling in Emergent Computational Systems (SMECS 2008), 37th International Conference on Parallel Processing (ICPP-08), Portland, Oregon, USA, pp. 181-187, September 2008. (IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi103.** **C. Dobre**, V. Ramiro, A. Muraru, I. C. Legrand. An Agent Based Framework to Monitor and Control High Performance Data Transfers, in Proc. of IEEE Region 8 EUROCON 2007, Warsaw, Poland, pp. 453-458, September 2007. WOS:000257261901039 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi104.** **C. Dobre**, V. Cristea. A Simulation Model for Large Scale Distributed Systems, in Proc. of 4th International Conference on Innovations in Information Technology (Innovations'07), Dubai, United Arab Emirates, pp. 526-530, November 2007. WOS:000255983000064 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)
- Vi105.** F. Pop, **C. Dobre**, G. Godza, V. Cristea, A Simulation Model for Grid Scheduling Analysis and Optimization, in Proc. of PARELEC Conference, Bialzstok, Poland, pp. 133-138, September 2006. WOS:000241727600022 (ISI Proc. – SCI, IEEE CNF, INSPEC, published by IEEE Computer Society)

- Vi106.** D. Comaneci, S. Stegaru, **C. Dobre**. Wireless Router as a Physical Access Control System (WRPACS), in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 78-84, April 2012. (published by Eurosis)
- Vi107.** E. Burceanu, **C. Dobre**, V. Cristea. Social Shopping Adviser: Recommandation platform based on mobile services, in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 39-45, April 2012. (published by Eurosis)
- Vi108.** C. Negru, F. Pop, **C. Dobre**, V. Cristea. Benchmark Analysis for Advanced Distributed Data Storage for Heterogeneous Clusters, in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 67-74, April 2012. (published by Eurosis)
- Vi109.** D. Popescu, N. Popescu, F. Pop, V. Ciobanu, **C. Dobre**, V. Cristea. Security Communication Layer for Public Distributed Reporting Services, in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 100-107, April 2012. (published by Eurosis)
- Vi110.** A. Ciminian, **C. Dobre**. Digua: Minifier and Obfuscator for Web Resources, in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 21-26, April 2012. (published by Eurosis)
- Vi111.** A. Pastrascu, C. Leordeanu, **C. Dobre**, V. Cristea. ReC2S: Reliable Cloud Computing System, in Proc. of 17th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (EUROMEDIA'2012), Bucharest, Romania, pp. 5-13, April 2012. (published by Eurosis)
- Vi112.** **C. Dobre**. A Simulation Study for T0/T1 Data Replication & Production Activities within CMS, in Proc. of 25th European Simulation and Modelling Conference (ESM'2011), Guimaraes, Portugal, pp. 182-189, October 2011. (published by Eurosis)
- Vi113.** **C. Dobre**, F. Pop, V. Cristea, J. Kolodziej. An Advanced Simulation Model for Dependable Distributed Systems, in Proc. of 25th European Conference on Modelling and Simulation (ECMS 2011), Krakow, Poland, pp. 511-517, June 2011. (published by European Modeling Society)
- Vi114.** M. Muraru, A. Agache, M. Popovici, **C. Dobre**. Modeling of Standards and the Open World Assumption, in Proc. of Future Business Technology (FUBUTEC 2011), London, UK, pp. 5-17, April 2011. (published by Eurosis)
- Vi115.** M. Muraru, A. Agache, M. Popovici, **C. Dobre**. Modeling of Standards and the Open World Assumption, in Proc. of Future Business Technology (FUBUTEC 2011), London, UK, pp. 5-17, April 2011. (published by Eurosis)
- Vi116.** **C. Dobre**, G.C. Tudor. Mobile Advertisement in Vehicular Ad-Hoc Networks, in Proc. of 16th Annual Scientific Conference on Web Technology, New Media, Communications and Telematics Theory, Methods, Tools and Applications (Euromedia'2011), London, UK, pp. 43-50, April 2011. (published by Eurosis)
- Vi117.** R. Voicu, I. Legrand, H. Newman, A. Barczyk, C. Grigoras, **C. Dobre**, A. Costan, A. Mughal, S. Rozsa. Monitoring and operational management in USLHCNet, in Proc. of Grid Middleware and Networking Technologies (CHEP'09), Prague, Czech Republic, March 2009. (published by CERN)
- Vi118.** R. Voicu, I. Legrand, H. Newman, **C. Dobre**, N. Tapus. A Distributed Agent System for Dynamic Optical Path Provisioning, in Proc. of Intelligent Systems and Agents (ISA), IADIS International Conference (IADIS 2007), Lisbon, Portugal, pp. 172-177, March 2007. (published by IADIS society)
- Vi119.** I.C. Legrand, C. Cirstoiu, S. McKee, H. Newman, R. Voicu, C. Dobre. VINCI : Virtual Intelligent Networks for Computing Infrastructures, in Proc. of Computing for High Energy Physics (CHEP'06), Mumbai, India, February 2006. (published by CERN)
- Vi120.** I.C. Legrand, H. Newman, R. Voicu, C. Cirstoiu, C. Grigoras, **C. Dobre**. MonALISA: An Agent based, Dynamic Service System to Monitor, Control and Optimize Grid based Applications, in Proc. of Computing in High Energy and Nuclear Physics (CHEP'04), Interlaken, Switzerland, 2004. (published by CERN)
- Vi121.** I.C. Legrand, H. Newman, **C. Dobre**, C. Stratan. Monarc Simulation Framework, in Proc. of the IX International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT'03), Tsukuba, Japan, 2003. (published by CERN)
- Vi122.** I.C. Legrand, H. Newman, C. Stratan, **C. Dobre**, F. van Lingen, K. Paschen. A Processes Oriented, Discrete Event Simulation Framework for Modelling and Design of Large Scale Distributed Systems, in Proc. of the IX International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT'03), Tsukuba, Japan, 2003. (published by CERN)
- Vi123.** F. van Lingen, K. Paschen, I.C. Legrand, **C. Dobre**, C. Stratan. Failure and dependencies of processes within models for the CMS DC04 using the MONARC simulation framework and monitoring data, in Proc. of

the IX International Workshop on Advanced Computing and Analysis Techniques in Physics Research (ACAT'03), Tsukuba, Japan, 2003. (published by CERN)

**Vn1.** F. Pop, M. Andreica, **C. Dobre**, R. Rughinis, A. Moldoveanu, C. Boiangiu. eUPB: Towards an Integrated e-Service Platform in Large Scale Distributed Environments, in Proc. of 18th International Conference on Control Systems and Computing Science (CSCS-18), Bucharest, Romania, pp. 509-521, May 2011. (published by Ed. Politehnica Press)

**Vn2.** R.I. Ciobanu, **C. Dobre**. Data Dissemination in Opportunistic Networks, in Proc. of 18th International Conference on Control Systems and Computing Science (CSCS-18), Bucharest, Romania, pp. 529-537, May 2011. (published by Ed. Politehnica Press)

**Vn3.** C. Giumale, L. Negreanu, M. Muraru, M. Popovici, A. Agache, **C. Dobre**. Modeling With Fluid Qualities, in Proc. of 18th International Conference on Control Systems and Computing Science (CSCS-18), Bucharest, Romania, pp. 693-699, May 2011. (published by Ed. Politehnica Press)

**Vn4.** L. Negreanu, C. Giumale, A. Agache, M. Muraru, M. Popovici, **C. Dobre**. A Formal Approach for the Development of Service-Oriented Applications, in Proc. of 18th International Conference on Control Systems and Computing Science (CSCS-18), Bucharest, Romania, pp. 804-811, May 2011. (published by Ed. Politehnica Press)

**Vn5.** **C. Dobre**, F. Pop, A. Costan, M. I. Andreica, V. Cristea. Robust Failure Detection Architecture for Large Scale Distributed Systems, in Proc. of 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 133-141, 2009. (published by Ed. Politehnica Press)

**Vn6.** R. Voicu, I.C. Legrand, H. Newman, N. Tapus, **C. Dobre**. A distributed service for on demand end to end optical circuits, in Proc. of 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 155-161, 2009. (published by Ed. Politehnica Press)

**Vn7.** F. Pop, A. Costan, **C. Dobre**, V. Cristea. Prediction Based Meta-Scheduling for Grid Environments, in Proc. of 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 330-337, 2009. (published by Ed. Politehnica Press)

**Vn8.** A. Costan, F. Pop, C. Stratan, **C. Dobre**, V. Cristea. An Architectural Model for a Grid based Workflow Management Platform in Scientific Applications, in Proc. of 3rd International Workshop on High Performance Grid Middleware, the 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 407-414, May 2009. (published by Ed. Politehnica Press)

**Vn9.** F. Pop, **C. Dobre**, A. Costan, M.I. Andreica, E.-D. Tirsă, C. Stratan, V. Cristea. Critical Analysis of Middleware Architectures for Large Scale Distributed Systems, in Proc. of 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 41-48, 2009. (published by Ed. Politehnica Press)

**Vn10.** M.I. Andreica, E.-D. Tirsă, N. Tapus, F. Pop, **C. Dobre**. Towards a Centralized Scheduling Framework for Communication Flows in Distributed Systems, in Proc. of 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 84-92, 2009. (published by Ed. Politehnica Press)

**Vn11.** **C. Dobre**, F. Pop, V. Cristea. DistHash: A robust P2P DHT-based system for replicated objects, in Proc. of 3rd International Workshop on High Performance Grid Middleware, the 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 453-460, May 2009. (published by Ed. Politehnica Press)

**Vn12.** V. Cristea, **C. Dobre**, F. Pop, C. Stratan, A. Costan, C. Leordeanu. Models and Techniques for Ensuring Reliability, Safety, Availability and Security of Large Scale Distributed Systems, in Proc. of 3rd International Workshop on High Performance Grid Middleware, the 17th International Conference on Control Systems and Computer Science (CSCS-17), Bucharest, Romania, pp. 401-406, May 2009. (published by Ed. Politehnica Press)

**Vn13.** **C. Dobre**, R. Voicu, A. Muraru, I.C. Legrand. A Distributed Agent Based System to Control and Coordinate Large Scale Data Transfers, in Proc. of 16th International Conference on Control Systems and Computer Science (CSCS-16), Bucharest, Romania, pp. 64-68, May 2007. (published by Ed. Politehnica Press)

**Vn14.** F. Pop, C. Grigoras, A. Costan, **C. Dobre**, V. Cristea. Tehnologii actuale in sistemele Grid (eng. Current Grid technologies), in Atelier de Lucru MEDIOGRID, vol. 1, Ed. MEDIAMIRA, Cluj-Napoca, Romania, pp. 85-103, 2006.

**Vn15.** I.C. Legrand, **C. Dobre**, R. Voicu, C. Cirstoiu. LISA (Local Host Information Service Agent), in Proc. of the 15th International Conference on Control Systems and Computer Science (CSCS-15), Bucharest, Romania, pp. 127-130, 2005. (published by Ed. Politehnica Press)

**Vn16.** I.C. Legrand, **C. Dobre**, R. Voicu, C. Stratan, C. Cirstoiu, L. Musat. A Simulation Study for T0/T1 Data Replication and Production Activities, in Proc. of the 15th International Conference on Control Systems and Computer Science (CSCS-15), Bucharest, Romania, pp. 131-135, 2005. (published by Ed. Politehnica Press)

**Vn17.** C. Dobre, C. Stratan. Simulation Framework for Modeling Large-Scale Distributed Systems, in Proc. of the 14th International Conference on Control Systems and Computer Science (CSCS-14), Bucharest, Romania, pp. 145-149, 2003. (published by Ed. Politehnica Press)

## **Lista contractelor (selectie in ultimii 10 ani)**

### **Contracte finanțate din sursă națională:**

- 2014-2017: MobiWay – Platformă Integrată pentru Sistemele de Transport Inteligent ale Viitorului, Proiect de parteneriat CNCSIS-PN-II-PT-PCCA-2013-4, Contract de finanțare nr. 16 / 2014. Contribuție personală: Director de proiect, proiectarea arhitecturii, dezvoltarea de servicii. Valoare: 785.000 RON.
- 2010-2013: CAPIM - Context-Aware Platform using Integrated Mobile Services, Contract de Cercetare Postdoctorală nr. EXCEL N1/5 din 01.05.2010 (Responsabil de proiect: Ciprian Dobre), finanțat prin contractul de finanțare POSDRU/89/1.5/S/62557 "Excelență în cercetare prin programe postdoctorale în domenii prioritare ale societății bazate pe cunoștere" (EXCEL), competiția 2010. Contribuție personală: Director de proiect, dezvoltarea arhitecturii sistemului dependent de context, a modelelor contextuale și componente mobile.
- 2015-2017: DataWay - Real-time Data Processing Platform for Smart Cities: Making sense of Big Data, PN-II-RU-TE-2014-4-2731, Director proiect: Conf.dr.ing. Florin Pop. Contribuție personală: modelare date, proiectare și dezvoltare metode și tehnici achiziție și procesare inteligentă a datelor.
- 2014-2016: CLUeFARM - Information system based on cloud services, accessible through mobile devices, for quality improvement of products and business development in farms, PNII, ID. 29/2014, Director proiect: Prof.dr.ing. Valentin Cristea. Contribuție personală: proiectare soluție achiziție date pornind de la componente hardware pentru achiziție.
- 2012-2013: SideDOWN - Smart Internet Data Downloader and Aggregator, National PNII - Servicii suport pentru inovare – Cecuri de , ID: PN-II-IN-CI-2012-1-0324, Benef.: SC Essentials Systems SRL. Contribuție personală: suport pentru implementare servicii achiziție și procesare date.
- 2013-2015: Pregătirea Sistemului Național de e- Administrație în România - SMIS 32612, cofinanțat din Fondul Social European, prin Programul Operațional Dezvoltarea Capacității Administrative (PO-DCA), Manager Proiect: Marius Dorian Nicolăescu. Contribuție personală: dezvoltare și training module curs Cloud în Administrația Publică.
- 2012-2013: Proiect HEART (tip PC): "High Performance Computing of Personalized Cardio Component Models" (Contract UEFISCDI - 130/2012). Contribuție personală: supervizare activități de implementare module software suport.
- 2010-2012: Programul PN-II PD, *TRANSYS – Models and Techniques for Traffic Optimizing in Urban Environments*, Contract CNCSIS-PN-II-RU-PD ID: 238 (Director proiect: Ciprian Dobre). Participant în calitate de director (unic participant). Contribuție personală: dezvoltarea de modele și metode de optimizare a traficului urban, prin captarea datelor din trafic, construirea de modele de trafic, asigurarea controlului în trafic prin metode de navigație dinamică, folosirea de semafoare inteligente, totul peste soluții destinate asigurării securității și toleranței la defecte în cazul schimbului de date.
- 2011-2013: OIPOSSTRU, Proiect Multi-Regional, Axa: 1."Educația și formarea profesională în sprijinul creșterii economice și dezvoltării societății bazate pe cunoștere", ID: 57748, *Program strategic pentru promovarea inovării în servicii prin educație deschisă, continuă (INSEED)*, (Director proiect: Prof.dr.ing. T. Borangiu). Contribuție personală: dezvoltarea conținutului cursului de formare continuă Servicii Cloud.
- 2008-2011: Programul PN-II, Programul 4 "Parteneriate în domeniile prioritare", nr. 278/07.11.2008, *INFOSTRUCTURE: Advanced electronic services platform for optimizing and adapting businesses to real-time economy* (Director proiect: Mihai Tănase, UTI București). Contribuție personală: dezvoltarea de soluții destinate tranzacțiilor electronice.
- 2009-2011: Programul Operațional POS CCE, Axa Prioritară AP2: Creșterea Competitivității Economice prin Cercetare - Dezvoltare și Inovare, Contract 51 / 11.05.2009, *GEEA – Centru de resurse GRID multicore de înaltă performanță pentru suportul cercetării* (Director proiect: Prof.dr.ing. N. Tăpuș). Contribuție personală: Soluții software pentru modelarea și simularea sistemelor distribuite de tip Grid.
- 2008-2011: POS CCE nr. 154/323 cod SMIS – 4428, proiect co-finanțat prin Fondul European de Dezvoltare Regională, "Investiții pentru viitorul dumneavoastră", *Platformă de eLearning și curriculă*

*eContent pentru învățământul superior tehnic*, (Director proiect: Prof.dr.ing. N. Tăpuș). Contribuție personală: dezvoltarea conținutului digital pentru cursurile Instrumente pentru Dezvoltarea Programelor și Administrarea Bazelor de Date I.

- 2008–2011: Programul PN-II IDEI, *DEPSYS – Modele și Tehnici de Asigurare a Fiabilității, Siguranței, Disponibilității și Securității Sistemelor Distribuite de Mari Dimensiuni*. Director proiect: Prof. Dr. Ing. Valentin Cristea. Contribuție personală: Coordonarea activităților de definire a funcționalităților componentelor de monitorizare, planificare, management de date, securitate și toleranță la defecte, definire a mecanismelor de extindere pentru obținerea unor nivele de încredere diferite și elaborare a unor propuneri de optimizare pentru dezvoltarea aplicațiilor de încredere.
- 2008–2010: Programul PARTENERIATE IN DOMENIILE PRIORITARE, *PEGAF – Platformă experimentală Grid pentru dezvoltarea de aplicații orientate pe fluxuri de activități cu alocarea dinamică a resurselor*, coordonator ICI București. Director proiect: Dr. Ing. Gabriel Neagu. Contribuție personală: Evaluarea și propunerea de implementare a unei componente orientată spre planificarea și managementul serviciilor implicate în fluxurile de activități ce descriu aplicațiile științifice. Am propus de asemenea soluții de integrare cu un mecanism de simulare a diferitelor politici și modele de planificare cu scopul calibrării, testării și evaluării. Simularea este o componentă importantă, oferind posibilitatea unei analize detaliate, înainte de integrarea în mediile reale. Interoperabilitatea cu gLite și folosirea facilităților oferite pe partea de planificare vor fi luate în considerare dezvoltarea componentei de planificare. Componenta de planificare poate colabora, dacă este cazul cu alte sisteme de planificare locale sau globale din Grid.
- 2008–2010: Programul 4 PARTENERIATE IN DOMENIILE PRIORITARE, Planul Național de Cercetare-Dezvoltare și Inovare II, *SERAFIGMO - Platforma integrată pentru tranzacții și servicii electronice finanțiar-bancare realizate folosind tehnologia disponibilă pe dispozitivele mobile cu raspandire largă*, Coordonator UPB, Director Proiect: Prof.Dr.Ing. Valentin Cristea. Contribuție personală: Identificarea tehnologiilor folosite în dezvoltarea proiectului, mai exact pentru tipurile de tranzacții și plăti suportate; Proiectarea modelelor experimentale ale serviciilor sistemului integrat de servicii financiare mobile; Demonstrația funcționalităților modelului experimental; Proiectarea modului de servicii procesare tranzacții.
- 2007–2008: Grant CNCSIS Tip A 154/2006, *Planificarea Descentralizată în Medii GRID Bazată pe Arhitectura Serviciilor WEB*. Director Proiect: Prof. Dr. Ing. Valentin Cristea. Contribuție personală: Evaluarea prin simulare de diverse algoritmi de planificare utilizati în prezent în Grid-ul global, analiza resurselor middleware existente în Gridul global, evaluarea algoritmilor de planificare descentralizată implementați cu ajutorul serviciilor web, elaborarea unor propuneri de îmbunătățire a modelului de planificare, realizarea paginii web a proiectului.
- 2004–2006: Grant CNCSIS Tip A 288/2005, *Gestiunea resurselor și Planificarea Activităților în Sistemele Distribuite Bazate pe Tehnologii Grid*. Director Proiect: Prof. Dr. Ing. Valentin Cristea. Contribuție personală: O sinteză originală a soluțiilor pentru gestiunea resurselor utilizate în prezent și a măsurilor de performanță. Sinteză oferă o perspectivă asupra modelelor de gestiune a resurselor, din punct de vedere al arhitecturii acestora și din punct de vedere al aplicabilității (la nivel de nod, la nivel de cluster sau inter-cluster) având în vedere caracteristicile sistemelor distribuite mari, de tip Grid. Sinteză consideră și impactul pe care îl au diverse soluții de monitorizare asupra calibării și controlului automat al resurselor în sisteme distribuite mari de tip Grid.
- 2004–2006: Grant INFOSOC, *Monitorizarea distribuită a middleware-ului și a aplicațiilor din infrastructura Grid națională*, acr. MON-I. Director Proiect: Prof. Dr. Ing. Valentin Cristea. Contribuție personală: Evaluarea de soluții de monitorizare a aplicațiilor distribuite rulând în medii Grid, în particular în cadrul infrastructurii Grid naționale. Implementarea unei soluții de monitorizare a nodurilor din clusterele existente la nivel național în diverse organizații virtuale.
- 2005–2008: Grant INFOSOC, *MedioGRID – Prelucrarea grafică paralelă și distribuită pe structura Grid a datelor geografice și de mediu*, proiect CEEX 2005, MODUL-1, tip P-CD, coordonator UT Cluj. Director proiect: Dr. Ing. Gabriel Neagu. Contribuție personală: Propunerea, evaluarea și implementarea/adoptarea unor soluții de monitorizare Grid pentru platforma MedioGRID, folosind sistemele MonALISA și ApMon. De asemenea, am contribuit la dezvoltarea de algoritmi de prelucrare cooperativa în sisteme multi-agent.
- 2005–2008: Grant RELANSIN, *GridMOSI – Organizație virtuală în tehnologie Grid pentru modelare, simulare și optimizare de înaltă performanță*, Proiect CEEX, coordonator ICI București. Director proiect: Prof. Dr. Ing. Gabriel Neagu. Contribuție personală: La nivel național, în cadrul proiectului GridMOSI am adus contribuții în metodele de optimizare a aplicațiilor Grid în cadrul unei organizații virtuale având ca

scop găsirea celor mai bune soluții pe această tematică. A fost dezvoltată o soluție de modelare a sistemelor și aplicațiilor Grid, precum și instrumente specifice pentru evaluarea prin simularea și optimizarea performanțelor aplicațiilor rulând în medii Grid. Soluția de modelare prin simulare păstrează caracteristicile sistemelor Grid și permite evaluarea unei game largi de aplicații din domeniu, pornind de la protocoale și servicii pentru transferuri de date până la evaluarea unor soluții de toleranță la defecte, replicare, planificare în medii distribuite și chiar aplicații compuse din activități descentralizate.

- 2005–2008: Grant RELANSIN, *Monitorizarea distribuită a resurselor din infrastructura Grid națională*, acr. MON-R. Director Proiect: Prof. Dr. Ing. Nicolae Tapus. Contribuție personală: Evaluarea de soluții de monitorizare a resurselor distribuite existente în medii Grid, în particular în cadrul infrastructurii Grid naționale. Implementarea unei soluții de monitorizare a nodurilor din clusterele existente la nivel național în diverse organizații virtuale.
- 2005 – 2006: *EquiPoly, Creating a modern R&D infrastructure for advanced Grid computing and a testbed for various technologies*, Proiect suportat de IBM în Programul Equinox Scholar. Contribuție personală: Dezvoltarea infrastructurii de cercetare din catedra de Calculatoare și constituirea unei baze de cercetare pentru masteranzii și doctoranzii din catedra. Am lucrat la elaborator unei descrieri a diverselor proiecte în care infrastructura oferită de IBM va fi folosită în activitatea de cercetare. Este integrat acum în cluster-ul UPB și este folosit pentru testarea și dezvoltarea aplicațiilor din diverse proiecte de cercetare.

### **Contractele finanțate din sursă internațională:**

- 2014-2017: ICT COST Action IC1406, "High-Performance Modelling and Simulation for Big Data Applications" (cHiPSet), proiect EU COST. Contribuție personală: Responsabil de rețea națională de cercetare și membru în Comitetul de Management al Acțiunii (responsabil de partenerul România, în cadrul Acțiunii).
- 2013-2017: ICT COST Action IC1303, "Algorithms, Architectures and Platforms for Enhanced Living Environments" (AAPELE), proiect EU COST. Contribuție personală: Responsabil de rețea națională de cercetare și membru în Comitetul de Management al Acțiunii (responsabil de partenerul România, în cadrul Acțiunii).
- 2016-2020: COST Action CA15127, "Resilient communication services protecting end-user applications from disaster-based failures (RECODIS)". Contribuție personală: Reprezentant ca Membru Substituent.
- 2016-2020: COST Action CA15140, "Improving Applicability of Nature-Inspired Optimisation by Joining Theory and Practice (ImAppNIO)". Contribuție personală: Reprezentant ca Membru Substituent.
- 2016-2019: Data4Water - Excellence in Smart Data and Services for Supporting Water Management, H2020-TWINN-2015, Director: Prof.dr.ing. Mariana Mocanu (UPB). Contribuție personală: responsabil UPB pentru WP4, activități de tip scientific events, respectiv dezvoltarea de materiale livrabile pentru tehnologii de management a apei.
- 2013-2014: SideSTEP - Metode de Planificare pentru Sisteme Distribuite Dinamice: o Abordare Adaptiva (Scheduling Methods for Dynamic Distributed Systems: a self-\* approach), International PNII - Cooperări Bilaterale, ID: PN-II-CT-RO-FR-2012-1-0084, Benef.: UEFISCDI. Contribuție personală: responsabil activități implementare componente pentru sisteme adaptive.
- 2013-2017: ICT COST Action IC1302, "Semantic keyword-based search on structured data sources" (KEYSTONE), proiect EU COST. Contribuție personală: Reprezentat ca Membru Substituent în Comitetul de Management al Acțiunii.
- 2010-2013: FP7-REGPOT-2010-1, *ERRIC -Empowering Romanian Research on Intelligent Information Technologies*, ID: 264207 (Director proiect: Prof.dr.ing. Adina Magda Florea). Contribuție personală: dezvoltarea domeniului sistemelor distribuite de mari dimensiuni în cadrul Facultății de Automatică și Calculatoare și alinierea acestuia la standardele Horizon 2020.
- 2008 – prezent: *FP7 - SEE-GRID-SCI eInfrastructure for regional eScience*, proiect de tip IP finanțat de Comisia Europeană sub Programul Cadru FP7, coordonator național ICI. Contribuție personală: Dezvoltarea unei platforme orientată spre planificarea și managementul serviciilor implicate în fluxurile de activități ce descriu aplicațiile științifice. Am propus de asemenea soluții de integrare cu un mecanism de simulare a diferitelor politici și modele de planificare cu scopul calibrării, testării și evaluării. Simularea este o componentă importantă, oferind posibilitatea unei analize detaliate, înainte de integrarea în mediile reale. Datorită faptului că platforma Grid de lucru este gLite, interoperabilitatea cu gLite și folosirea

facilităților oferite pe partea de planificare vor fi luate în considerare dezvoltarea componentei de planificare. Componența de planificare poate colabora, dacă este cazul cu alte sisteme de planificare locale sau globale din Grid.

- 2008 – prezent: *FP6 EGEE-III: Enabling Grids for E-science*, proiect finanțat de Comisia Europeană sub Programul Cadru FP6, coordonator național ICI. Contribuție personală: Integrarea instrumentului de monitorizare MonALISA în infrastructura EGEE din diverse centre de cercetare din România (în cadrul laboratorului de sisteme distribuite și a cluster-ului existent în cadrul Universității Politehnica București, dar și în cadrul Institutului de Fizică Nucleară s-au adoptat soluții de control bazate pe MonALISA la a căror implementare am participat), precum și adoptarea unor soluții de control și mențenanță în scopul asigurării unor parametri optimi de funcționare în cazul sistemelor distribuite de tip Grid naționale. Am realizat de asemenea o propunere pentru studiul infrastructurii EGEE în vederea realizării și configurării unor componente pentru asigurarea disponibilității, toleranței la defecte, scalabilității, accesabilității sistemelor distribuite de mari dimensiuni.
- 2005 – 2008: *FP6 EU-NCIT – NCIT leading to EU IST excellency*, proiect finanțat de Comisia Europeană sub Programul Cadru FP6, coordonator NCIT-UPB. Director Proiect: Prof. Dr. Ing. Nicolae Tăpuș. Contribuție personală: În cadrul proiectului una din direcțiile de cercetare o reprezintă sistemele Grid. Am contribuit la elaborarea de documente privind stadiul actual în cercetare în domeniile de interes din Grid, am elaborat propuneri privind noi direcții de cercetare, organizare de training-uri, școli de vară, participări la conferințe, info-days, workshopuri pentru lărgirea domeniului de expertiză al membrilor proiectului.
- 2005 – 2008: *FP6 SEE-GRID-II South-Eastern European Grid-enabled eInfrastructure Development*, proiect finanțat de Comisia Europeană sub Programul Cadru FP6, coordonator național ICI. Contribuție personală: Contribuția mea s-a axat pe dezvoltarea unor componente de monitorizare pentru aplicații și sisteme distribuite bazate pe infrastructura Grid din Sud-Estul Europei. De asemenea am avut contribuții pe partea de documentație prin realizarea unui ghid despre gridificare a aplicațiilor și a dezvoltării de aplicații folosind MPI și extensiile acestuia.
- 2005 – 2008: *FP6 EGEE-II: Enabling Grids for E-science*, proiect finanțat de Comisia Europeană sub Programul Cadru FP6, coordonator național ICI. Contribuție personală: Contribuția majoră în cadrul acestui proiect a constat în sesiunile de instruire din cadrul școlii de vară GridInitiative, edițiile 2, 3 și 4. Prezentările ținute de mine au fost în domeniul sistemelor Grid și monitorizării sistemelor distribuite de mari dimensiuni, precum și realizarea de aplicații distribuite. Tot în cadrul acestor evenimente am coordonat echipe de studenți în activități de învățare a tehnologiilor și proceselor specifice unor sisteme Grid precum gLite și Globus.

Menționez contribuțile științifice și de cercetare în domeniul sistemelor distribuite pe scară largă, cu contribuții particulare în cercetarea/dezvoltarea de soluții: aplicații mobile și tehnologii inteligente pentru reducerea congestiilor în medii urbane și a poluării, respectiv creșterea confortului în trafic (proiecte precum MobiWay, TRANSYS), aplicații dependente de context (CAPIM), rețele oportuniste și offloading de date mobile (SPRINT, SENSE, ON-SIDE, HYCCUPS), monitorizare (MonALISA), rețele de mare viteză (VINCI, FDT), aplicații Grid (EGEE, SEE-GRID), evaluarea prin modelare și simulare (MONARC 2, VNSim, Sim2Car, MobEmu). Aceste contribuții au condus la rezultate importante, demonstrând capacitatea de a aduce un aport științific în comunitatea mondială peste nivelul state-of-the-art. Ca urmare a acestor contribuții, mi-a fost acordat prestigiosul premiu IBM Faculty Award, am beneficiat de un contract de cercetător din partea California Institute of Technology (Caltech, USA), sau de o bursă de doctorat din partea companiei Oracle. Printre alte premii, amintesc cele două premii CENIC Award, trei Best Paper Awards (în 2013, 2012 și 2010) și un Runner Up Award (în 2015).