



### Personal information

First name(s) / Surname(s)

**Ciprian Dobre**

Address(es)

Room PR 605, Computer Science Department, University POLITEHNICA of Bucharest, Splaiul Independentei 313, Sector 6, Bucharest, 060042, Romania

Telephone(s)

+40-745174359

Fax(es)

+40-318163028

E-mail

[ciprian.dobre@cs.pub.ro](mailto:ciprian.dobre@cs.pub.ro)

Nationality

Romanian

Date of birth

06/09/1979

Gender

Male

### Underlined place of work/Occupational field

University Politehnica Bucharest, Faculty of Automatic Control and Computer Science  
Computer Department

### Professional experience

Dates

October 2009- present

Occupation or position held

Professor within the Computer Science Department, University Politehnica of Bucharest.  
Personal page: <http://cipsm.hpc.pub.ro>

Main activities and responsibilities

Current research areas: distributed systems, modelling and simulation, monitoring, context-aware applications, mobile applications (embedded, vehicular networks).

Courses taught at Computer Science Department, UPB:

Bachelor:

- Parallel and Distributed Algorithms (2008-)
- Instruments for Software Development (2008-)
- Web Programming (2008-)

Master:

- Cloud Computing (2011-)
- Dependable Systems (2009-)
- Database Administration (2009-2011)

Applications taught at Computer Science Department, UPB:

- Communication Protocols (2005-)
- Programming Systems for Computer Networks (2006-)

Member of societies and professional associations:

- IEEE Computer Society
- ACM - Association of Computing Machinery
- Eurosis – The European Multidisciplinary Society for Modelling and Simulation Technology

Research: minimum 70% of allocated time.

2011: Research visit (2 months) to INRIA Rennes, France. Working with Gabriel Antoniu and Luc Bougé (within the KerData joint research team between INRIA and UPB).

2006: Research visit (4 months) with funding from the OpenLab program, CERN, Switzerland. Working with Iosif C. Legrand (Caltech) and Harvey Newman (Caltech).

Author of 3 books, 3 chapters in edited books, 10 articles in major international peer-reviewed journal (4 as main author), 61 articles in well-established international conferences and workshops (47 indexed by IEEE and ACM, 16 articles published as main author).

Early scientific and scholarly contributions in the field of large scale distributed systems:

- monitoring (MonALISA),

- high-speed networking (VINCI, FDT),
- Grid application development (EGEE, SEE-GRID),
- evaluation using modeling and simulation (MONARC 2, VNSim),
- mobile applications and smart technologies to reduce urban congestion and air pollution (TRANSYS),
- context-aware applications (CAPIM).

In collaboration with CERN and Caltech Ciprian Dobre developed an important monitoring application for large scale distributed systems, *MonALISA*:

- It collects more than 2 million persistent parameters in real-time, with 25.000 updates per second.
- It provides continuous support and control for approximately 40.000 computers and 100 WAN links worldwide, supporting 8 million user requests each day.

Good experience in networking technologies, with results in the development of high speed networking applications to support large distributed environments (the VINCI project).

- Developer for FDT and LISA – these applications led to world-wide record transfers over high speed networks during the Super Computing conferences in 2006, 2007, 2008 and 2009.
- For achieving these records for fast transfers brought to Ciprian Dobre an international recognition, in the form of two Awards by CENIC for Innovations in Networking, in 2006 and 2008.

Important scientific and scholarly contributions in the field of modeling and simulation of large scale distributed systems (in collaboration with CERN and Caltech, he developed MONARC 2).

- The simulator was successfully used in simulation experiments that led to the evaluation and assessment of the production systems used in the LHC experiments at CERN.

The DEPSYS project, to be finished this year, is a national-funded project targeting models, methods, and techniques to increase the dependability in large scale distributed systems.

- Results published in prestigious scientific conferences and journals, with one Best Paper Award.

Member in over 10 scientific committees of international conferences, between 2006-2011.

- *Member in editorial staff of international journals or international publishing houses:* Associated Editor for Innovative Studies: International Journal (ISIJ), ISSN: 2180-2157, CSC Journals; Editor for Journal of Convergence Information Technology (JCIT), ISSN: 1975-9320.
- *Member in the organizing committees or committees of scientific international conferences and workshops:* FUBUTEC 2011 - General chair; 3PGCIC2010; IEEE VTC-2010 Spring; ICCIT 2010; NISS 2010; IDCTA 2010; NCM 2010; ICIPM 2010; MiDiS 2010; HiPerGRID 2010; ACS/IEEE AICCSA 2010; CINS'10 Workshop; SEPA 2010; INC2010; IADIS WWW/Internet 2010; IEEE Vehicular Communications 2010; ICIS 2010; ADIS 2010; Africon 2009 (session chair for Computer, Information Systems and Software Engineering); CSCS17 (session chair for Distributed Systems); HiPerGRID 2009 - organizer; IEEE VTC2009-Spring; HiPerGRID 2008 - organizer; Innovations'07.
- *Scientific referee* for: IGI-Global edited book "Handbook of Research on P2P and Grid Systems for Service-Oriented Computing: Models, Methodologies and Applications", 2009; Scientific Journal International, Computer Science and Computer Engineering section; International Journal of Applied Mathematics and Computer Science (AMCS); International Journal of Ad Hoc and Ubiquitous Computing (IAHUC); International Journal of Grid and Utility Computing (IJGUC); Journal of Convergence Information Technology (JCIT); Innovative Studies: International Journal (ISIJ).

Awards and prizes recognizing the research:

- 2008: Innovations in Networking 2008 Award of Excellence, for innovative contributions to global research in computer networks - Award granted by the Corporation of Education Network Initiatives in California (CENIC), 2008.
- 2006: Innovations in Networking 2006 Award of Excellence for innovative contributions to global research in computer networks - Award granted by the Corporation of Education Network Initiatives in California (CENIC), 2006, as member of the VINCI project's development team.
- 2006-2008: Oracle Award. PhD Performance Scholarship for three years.
- 2003-2011: Research Fellowship from California Institute of Technology.
- 2003: First Prize within the Session of Students' Communication, University POLITEHNICA of Bucharest, section Systems and Internet Applications.

Name and address of employer

University Politehnica of Bucharest, 313 Splaiul Independentei, Bucharest, 060042, Romania

Type of business or sector Higher education

## Education and training

Dates 2004-2008

Title of qualification awarded PhD in Computer Science

Principal subjects/occupational skills covered Main subjects: Modelling and simulation of distributed systems  
PhD Title: Advanced techniques for modeling and simulation of Grid systems (advisor: Valentin Cristea), defended in January 2008, distinction CUM LAUDE.

Name and type of organisation providing education and training University Politehnica of Bucharest

Level in national or international classification ISCED 6

Dates 2003-2004

Title of qualification awarded M.Sc. in Computer Science

Principal subjects/occupational skills covered Main subjects: Modelling and simulation of distributed systems  
Master Thesis: Optimized data structures for PES implementations (advisor: Valentin Cristea).

Name and type of organisation providing education and training University Politehnica of Bucharest

Level in national or international classification ISCED 6

Dates 1998-2008

Title of qualification awarded University POLITEHNICA of Bucharest, Faculty of Automatic Controls and Computers, UPB, Computer Science Department

Principal subjects/occupational skills covered Specialty: Computer Science

Name and type of organisation providing education and training University Politehnica of Bucharest

Level in national or international classification ISCED 6

## Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	Writing
C2	C2	C2	C2	C2
B1	B1	B1	B1	B1

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Capacity to contribute to forming young specialists

Communication abilities and public presentation acquired through didactic activities and participation in various conferences.

Coordination and collaboration with colleagues in many research projects.

Organisational skills and competences	<p>Project director for two mentioned before.</p> <ul style="list-style-type: none"> <li>➤ Local project coordinator for the project CAPIM - Context-Aware Platform using Integrated Mobile Services, funded with 178.000 RON as part of the Sectoral Operational Programme Human Resources Development 2007-2013 of the Romanian Ministry of Labour, Family and Social Protection, Financial Agreement POSDRU/89/1.5/S/62557, 2010-2013.</li> <li>➤ Project director for the project TRANSYS – Models and Techniques for Traffic Optimizing in Urban Environments, funded with 310.000 RON by the National Program CNCSIS-PN-II-RU-PD, 2010-2012.</li> </ul> <p>Main applicant on the project DEPSYS – Models and Techniques for Ensuring Reliability, Safety, Availability, and Security for Large Scale Distributed Systems, funded with 989.000 RON within the National Program PN-II IDEI, 2008-2011.</p> <p>Organizer and Co-Chair of: FUBUTEC 2011 - General chair; 3PGCIC2010; IEEE VTC-2010 Spring; ICCIT 2010; NISS 2010; IDCTA 2010; NCM 2010; ICIPM 2010; MiDiS 2010; HiPerGRID 2010; ACS/IEEE AICCSA 2010; CINS'10 Workshop; SEPA 2010; INC2010; IADIS WWW/Internet 2010; IEEE Vehicular Communications 2010; ICIS 2010; ADIS 2010; Africon 2009 (session chair for Computer, Information Systems and Software Engineering); CSCS17 (session chair for Distributed Systems); HiPerGRID 2009 - organizer); IEEE VTC2009-Spring; HiPerGRID 2008 - organizer; Innovations'07.</p> <p>Member in editorial staff of international journals or international publishing houses: Associated Editor for Innovative Studies: International Journal (ISIJ), ISSN: 2180-2157, CSC Journals; Editor for Journal of Convergence Information Technology (JCIT), ISSN: 1975-9320.</p> <p>Within the Distributed Systems laboratory supervisor for over 40 Bachelor-level and 20 Master-level students (in the last five years). The results were jointly published in 24 articles in prestigious international conferences and workshops. They all finished with well-received Bachelor and Master Degree Theses and highest marks. Many of these students were later admitted to Master and PhD programs in top ranked universities.</p> <p>Coordinator and trainer for “UPB GridInitiative Summer School”: 2nd Edition (2005), 3rd Edition (2006), 4th Edition (2008).</p>
Technical skills and competences	Consultant on e-Government technologies and applications for e-CAESAR (2009 – present)
Computer skills and competences	Good programming skills, various environments and programming and development platforms
Artistic skills and competences	
Other skills and competences	
Driving licence	B licence
<b>Additional information</b>	
<b>Annexes</b>	List of papers and grants

**Experience gained as member in the research team of national and international research projects:**

Ciprian Dobre participated as researcher (until 2008) and experienced researcher (after 2008) in over 20 research grants in the field of Distributed Systems. The last relevant grants are:

2010-2013: *CAPIM - Context-Aware Platform using Integrated Mobile Services*, local project coordinator: **C. Dobre**, as part of Sectoral Operational Programme Human Resources Development 2007-2013 POSDRU/89/1.5/S/62557.

2010-2012: *TRANSYS – Models and Techniques for Traffic Optimizing in Urban Environments*, Contract CNCSIS-PN-II-RU-PD ID 238, Project Director: **C. Dobre**.

2008-2010: Vehicular Ad-Hoc Network Simulator (VNSim), collaboration between Rutgers University (USA) and UPB, local coordinator from UPB: **C. Dobre**.

2008–present (to end in 2011): *DEPSYS – Models and Techniques for Ensuring Reliability, Safety, Availability, and Security for Large Scale Distributed Systems*, National Program PN-II IDEI, Project Director: V. Cristea, UPB.

2009-present: INRIA "Associate Teams" Programme, DataCloud@work, Coordinator: Luc Bouge, INRIA.

2008–2010: *PEGAF – Experimental Grid platform for the development of applications oriented towards workflows with dynamic resource allocation*, National Program "Partnerships in Strategic Areas", Coordinator G. Neagu, ICI Bucharest.

2008–2010: *SERAFIMO - Integrated platform for transactions and electronic financial services based on the highly available mobile technology*, "Partnerships in Strategic Areas", Coordinator: V. Cristea, UPB.

2008–2010: *INFOSTRUCTURE - Advanced electronic services platform for optimizing and adapting businesses to real-time economy*, "Partnerships in Strategic Areas" National Program, Coordinator U.T.I.

2007–2008: *Decentralized Scheduling in Grid Environments Based on a WEB Services Architecture*, Grant CNCSIS A 154/2006, Project Director: V. Cristea, UPB.

2004–2006: *Resource management and Activity Scheduling in Distributed Systems based on Grid Technologies*, Grant CNCSIS A 288/2005, Project Director: V. Cristea, UPB.

2004-2006: *Distributed monitoring of middleware and applications in national Grid infrastructure*, acr. MON-I, Grant INFOSOC, Project Director: V. Cristea, UPB.

2005-2008: *MedioGRID – Parallel and distributed processing on Grid of geographical and environmental data*, Grant INFOSOC, CEEEX 2005, Project Director: D. Gorgan, Technical University Cluj-Napoca.

2005-2008: *GridMOSI – Virtual organization in Grid technology for high-performance modeling, simulation and optimization*, Grant RELANSIN, CEEEX, Coordinator ICI Bucharest.

2005-2008: *Distributed monitoring of resources in the national Grid infrastructure*, acr. MON-R, Grant RELANSIN, Project Director: N. Tapus, UPB.

2005-2006: *EquiPoly, Creating a modern R&D infrastructure for advanced Grid computing and a testbed for various technologies*, funded by IBM Equinox Scholar Program, Project Director: V. Cristea, UPB.

2008-2010: *FP7 - SEE-GRID-SCI eInfrastructure for regional eScience*, national Coordinator ICI Bucharest.

2008-2010: *FP6 EGEE-III: Enabling Grids for E-science*, national Coordinator ICI Bucharest.

2005-2008: *FP6 EU-NCIT – NCIT leading to EU IST excellency*, coordinator NCIT-UPB, Nicolae Țăpuș.

2003-2011: *MoNitoring Agents using a Large Integrated Services Architecture (MonALISA)*, collaboration between CERN, Caltech (USA), and UPB.

2004-2006: *Localhost Information Service Agent (LISA)*, collaboration CERN, Caltech (USA), and UPB.

2005-2010: *Fast Data Transfer (FDT)*, collaboration between CERN, Caltech (USA), and UPB.

2003-2011: *Models of Net. Anal. at Regional Centres (MONARC 2)*, collaboration CERN, Caltech, and UPB.

**List of Publications****Books (3):**

- [1] Ciprian Dobre, *Advanced techniques for modeling and simulation of Grid systems*, LAP Lambert Academic Publishing, ISBN: 978-3-8433-8042-3, 216 pg, December 2010.
- [2] Valentin Cristea, Ciprian Dobre, Corina Stratan, Florin Pop, Alexandru Costan, *Large-scale Distributed Computing and Applications : Models and Trends*, Ed. Information Science Publishing, 390 pg, April 2010.
- [3] Ciprian Dobre, Florin Pop, *Computer Network Software*, Ed. Politehnica Press, ISBN: 978-606-515-000-3, 198 pg, 2008.

**Book Chapters (3):**

- [1] Ciprian Dobre, *Monitoring and Controlling Grid Systems*, chapter in *Grid Computing: Towards a Global Interconnected Infrastructure (Computer Communications and Networks)*, Nikolaos Preve (Ed.), Ed. Springer, ISBN: 978-0857296757, pp. 171-203, 2011.
- [2] Ciprian Dobre, *A General Framework for the Modeling and Simulation of Grid and P2P Systems*, chapter 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.
- [3] Valentin Cristea, Florin Pop, Ciprian Dobre, and Alexandru Costan, *Distributed architectures for event-based systems, in Reasoning in Event-Based Distributed Systems*, Studies in Computational Intelligence Series, Helmer, Sven, Poulouvassilis,

#### Journal Papers (10):

- [1] Valentin Cristea, Ciprian Dobre, Florin Pop, Corina Stratan, Alexandru Costan, Catalin Leordeanu, A Dependability Layer for Large Scale Distributed Systems, in International Journal of Grid and Utility Computing (IJGUC), vol. 2, no. 2, pp. 109-118, 2011.
- [2] Ciprian Dobre, Andreea 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 (SCPE), vol. 12, no. 1, pp. 51-61, 2011.
- [3] Valentin Cristea, Ciprian Dobre, Alexandru Costan, Florin 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.
- [4] Ciprian Dobre, Florin Pop, Valentin Cristea, New Trends in Large Scale Distributed Systems Simulation, in Journal of Algorithms & Computational Technology (JACT), vol. 5, no. 2, pp. 221-257, 2011.
- [5] Adrian Boteanu, Ciprian Dobre, A Simulation Model for Fault Tolerance Evaluation, in U.P.B. Scientific Bulletin, Series C, Vol. 73, No. 1, 2011.
- [6] Florin Pop, Ciprian Dobre, Corina Stratan, Alexandru Costan, Valentin Cristea, Dynamic meta-scheduling architecture based on monitoring in distributed systems, in International Journal of Autonomic Computing (IJAC 2010), 2010, Vol. 1, No. 4, pp. 328-349, ISSN: 1741-8569.
- [7] Andrei Lavinia, Ciprian Dobre, Florin Pop, Valentin Cristea, A Failure Detection System for Large Scale Distributed Systems, in International Journal of Distributed Systems and Technologies (IJDST), Vol. 2, No. 3, pp. 64-87, July-September 2011.
- [8] Iosif C. Legrand, Harvey Newman, Ramiro Voicu, Catalin Cirstoiu, Costin Grigoras, Ciprian Dobre, Adrian Muraru, Alexandru Costan, Mihaela Dediu, Corina Stratan, MonALISA: An agent based, dynamic service system to monitor, control and optimize distributed systems, in Computer Physics Communications, Volume 180, Issue 12, pp. 2472-2498, December 2009.
- [9] Ciprian Dobre, Florin Pop, Valentin 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.
- [10] Ciprian Dobre, Corina Stratan, MONARC Simulation Framework, Scientific Bulletin of the Politehnica University of Timisoara, ROMANIA, Automatic Controls and Computers Series, PERIODICA POLITEHNICA, Transactions on AUTOMATIC CONTROL and COMPUTER SCIENCE, Vol. 49, No. 63, 2004, pp. 35-42, ISSN: 1224-600X, Ed. Politehnica Timisoara.

#### Conference Papers (61)

- [1] Iosif C. Legrand, Harvey Newman, Ramiro Voicu, Catalin Cirstoiu, Costin Grigoras, Ciprian 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.
- [2] Iosif C. Legrand, Ciprian Dobre, Ramiro Voicu, Corina Stratan, Catalin Cirstoiu, Lucian 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), pp. 131-135, ISBN: 973-8449-89-8, Ed. Politehnica Press, 2005.
- [3] Iosif C. Legrand, Ciprian Dobre, Ramiro Voicu, Catalin Cirstoiu, LISA (Local Host Information Service Agent), in Proc. of the 15th International Conference on Control Systems and Computer Science (CSCS-15), pp. 127-130, Ed. Politehnica Press, 2005.
- [4] Florin Pop, Ciprian Dobre, Gavril Godza, Valentin Cristea, A Simulation Model for Grid Scheduling Analysis and Optimization, in Proc. of the PARELEC Conference, pp. 133-138, IEEE Computer Society, 2006.
- [5] Ciprian Dobre, Ramiro Voicu, Adrian Muraru, Iosif C. Legrand, A Distributed Agent Based System to Control and Coordinate Large Scale Data Transfers, in Proc. of the 16th International Conference on Control Systems and Computer Science (CSCS-16), pp. 64-68, Ed. Politehnica Press, 2007.
- [6] Ciprian Dobre, Ramiro, Adrian Muraru, Iosif C. Legrand, An Agent Based Framework to Monitor and Control High Performance Data Transfers, in Proc. of the International Conference on Computer as a Tool (EUROCON 2007), pp. 453-458, IEEE Computer Society, 2007.
- [7] Ciprian Dobre, Valentin Cristea, A Simulation Model for Large Scale Distributed Systems, in Proc. of the International Conference on Innovations in Information Technology (Innovations'07), 2007, pp. 526-530, IEEE Computer Society.
- [8] Florin Pop, Ciprian Dobre, Valentin Cristea, Decentralized Dynamic Resource Allocation for Workflows in Grid Environments, in Proc. of the Workshop on Workflow and Process Management (WfPM'08), 10th International Symposium on Symbolic and Numeric Algorithms (SYNASC'08), 2008, pp. 557-563, IEEE Computer Society.
- [9] Florin Pop, Ciprian Dobre, Valentin Cristea, Evaluation of Multi-Objective Decentralized Scheduling for Applications in Grid Environment, in Proc. of the IEEE 4th International Conference on Intelligent Computer Communication and Processing (ICCP 2008), 2008, pp. 231-238, IEEE Computer Society.
- [10] Alexandru Costan, Ciprian Dobre, Valentin Cristea, Ramiro Voicu, A Monitoring Architecture for High-Speed Networks in Large Scale Distributed Collaborations, in Proc. of the International Symposium on Parallel and Distributed Computing (ISPDC'08), 2008, pp. 409-416, IEEE Computer Society.

- [11] Florin Pop, Ciprian Dobre, Valentin Cristea, Performance Analysis of Grid DAG Scheduling Algorithms using MONARC Simulation Tool, in Proc. of the International Symposium on Parallel and Distributed Computing (ISPDC'08), 2008, pp. 131-138, IEEE Computer Society.
- [12] Ciprian Dobre, Corina Stratan, Valentin Cristea, Realistic simulation of large scale distributed systems using monitoring, in Proc. of the 7th International Symposium on Parallel and Distributed Computing (ISPDC'08), 2008, pp. 434-438, IEEE Computer Society.
- [13] Ciprian Dobre, Florin Pop, Valentin Cristea, A Simulation Framework for Dependable Distributed Systems, in Proc. of the 37th International Conference on Parallel Processing (ICPP-08), First International Workshop on Simulation and Modeling in Emergent Computational Systems, 2008, pp. 181-187, IEEE Computer Society.
- [14] Ciprian Dobre, Florin Pop, Valentin Cristea, New Trends in Large Scale Distributed Systems Simulation, International Conference on Parallel Processing (ICPP), 2009, pp. 182-189, IEEE Computer Society.
- [15] Ciprian Dobre, Florin Pop, Valentin Cristea, Towards Scalable Simulation of Large Scale Distributed Systems, International Conference on Network-Based Information Systems (NBIS 2009), 2009, pp. 103-108, IEEE Computer Society.
- [16] Florin Pop, Ciprian Dobre, Valentin Cristea, Genetic Algorithm for DAG Scheduling in Grid Environments, in Proc. of the International Conference on Intelligent Computer Communication and Processing (ICCP 2009), 2009, pp. 299-305, IEEE Computer Society.
- [17] Ciprian Dobre, Florin Pop, Valentin Cristea, A Simulation Model for Evaluating Distributed Systems Dependability, in Proc. of the 23rd annual European Simulation and Modelling Conference (ESM'2009), 2009, pp. 62-69, EUROSIS-ETI.
- [18] Valentin Cristea, Ciprian Dobre, Florin Pop, Corina Stratan, Alexandru Costan, Catalin Leordeanu, Models and Techniques for Ensuring Reliability, Safety, Availability and Security of Large Scale Distributed Systems, in Proc. of the 3rd International Workshop on High Performance Grid Middleware (HiPERGrid), the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 401-406, Ed. Politehnica Press.
- [19] Ciprian Dobre, Florin Pop, Valentin Cristea, DistHash: A robust P2P DHT-based system for replicated objects, in Proc. of the 3rd International Workshop on High Performance Grid Middleware (HiPERGrid), the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 453-460, Ed. Politehnica Press.
- [20] Mugurel Ionut Andreica, Eliana-Dina Tirsa, Nicolae Tapus, Florin Pop, Ciprian Dobre, Towards a Centralized Scheduling Framework for Communication Flows in Distributed Systems, in Proc. of the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 84-92, Ed. Politehnica Press.
- [21] Florin Pop, Ciprian Dobre, Alexandru Costan, Mugurel Ionut Andreica, Eliana-Dina Tirsa, Corina Stratan, Valentin Cristea, Critical Analysis of Middleware Architectures for Large Scale Distributed Systems, in Proc. of the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 41-48, Ed. Politehnica Press.
- [22] Alexandru Costan, Florin Pop, Corina Stratan, Ciprian Dobre, Valentin Cristea, An Architectural Model for a Grid based Workflow Management Platform in Scientific Applications, in Proc. of the 3rd International Workshop on High Performance Grid Middleware (HiPERGrid), the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 407-414, Ed. Politehnica Press.
- [23] Ramiro Voicu, Iosif Legrand, Harvey Newman, Nicolae Tapus, Ciprian Dobre, A distributed service for on demand end to end optical circuits, in Proc. of the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 155-161, Ed. Politehnica Press.
- [24] Ciprian Dobre, Florin Pop, Alexandru Costan, Mugurel Ionut Andreica, Valentin Cristea, Robust Failure Detection Architecture for Large Scale Distributed Systems, in Proc. of the 17th International Conference on Control Systems and Computer Science (CSCS-17), 2009, pp. 133-141, Ed. Politehnica Press.
- [25] Florin Pop, Alexandru Costan, Ciprian Dobre, Corina Stratan, Valentin Cristea, Monitoring of Complex Applications Execution in Distributed Dependable Systems, in Proc. of the 8th International Symposium on Parallel and Distributed Computing (ISPDC'09), 2009, pp. 241-244, IEEE Computer Society.
- [26] Ana Gainaru, Ciprian Dobre, Valentin Cristea, A Realistic Mobility Model based on Social Networks for the Simulation of VANETs, in Proc. of the IEEE 69th Vehicular Technology Conference (VTC2009-Spring), 2009, pp. 1-5, ISBN: 978-1-4244-2517-4, IEEE Computer Society.
- [27] Marius Ion, Florin Pop, Ciprian Dobre, Valentin Cristea, Dynamic Resources Allocation in Grid Enviroments, in Proc. of the 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2009), 2009, pp. 213-220, IEEE Computer Society.
- [28] Marieta Nastase, Ciprian Dobre, Florin Pop, Valentin Cristea, Fault Tolerance using a Front-End Service for Large Scale Distributed Systems, in Proc. of the 11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2009), 2009, pp. 229-236, IEEE Computer Society.
- [29] Andreea Marin, Cristina Vlaicu, Alexandru Vita, Ciprian Dobre, Valentin Cristea, An eFramework to optimize public administration services, 2009, in Proc. of the Second International Conference on Developments in eSystems Engineering (DeSE 2009), 2009, pp. 233-239, IEEE Computer Society.
- [30] Florin Pop, Ciprian Dobre, Corina Stratan, Alexandru Costan, Valentin Cristea, Dynamic Meta-Scheduling Architecture based on Monitoring in Distributed Systems, in Proc. of the Third International Conference on Complex, Intelligent and Software Intensive System, Third International Workshop on P2P, Parallel, Grid and Internet computing – 3PGIC-2009 (CISIS'09), 2009, pp. 388-395, IEEE Computer Society.
- [31] Andrei Lavinia, Ciprian Dobre, Florin Pop, Valentin Cristea, A Failure Detection System for Large Scale Distributed Systems, Fourth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2010), 2010, pp. 482-489, IEEE Computer Society.

- [32] Mihai Istin, Andreea Visan, Florin Pop, Ciprian Dobre, Valentin Cristea, Near-Optimal Scheduling Based on Immune Algorithms in Distributed Environments, in Proc. of the Fourth International Conference on Complex, Intelligent and Software Intensive Systems (CISIS 2010), 2010, pp. 439-444, IEEE Computer Society.
- [33] Alexandra Olteanu, Florin Pop, Ciprian Dobre, Valentin Cristea, An adaptive scheduling approach in distributed systems, in Proc. of the International Conference on Intelligent Computer Communication and Processing (ICCP 2010), 2010, pp. 435-442, IEEE Computer Society.
- [34] Alexandru Costan, Ciprian Dobre, Florin Pop, Catalin Leordeanu, Valentin Cristea, A Fault Tolerance Approach for Distributed Systems Using Monitoring Based Replication, in Proc. of the International Conference on Intelligent Computer Communication and Processing (ICCP 2010), 2010, pp. 451-458, IEEE Computer Society.
- [35] George-Cristian Serban, Andrei-Daniel Dumitru, Alexandru Marinescu, Ciprian Dobre, Valentin Cristea, Routing Protocol for Urban Mobile Networks based on Geographical Location, in Proc. of the International Conference on Intelligent Computer Communication and Processing (ICCP 2010), 2010, pp. 479-483, IEEE Computer Society.
- [36] Adrian Boteanu, Ciprian Dobre, Florin Pop, Valentin Cristea, Simulator for Fault Tolerance in Large Scale Distributed Systems, in Proc. of the International Conference on Intelligent Computer Communication and Processing (ICCP 2010), 2010, pp. 443-450, IEEE Computer Society.
- [37] Florin Pop, Ciprian Dobre, Decebal Popescu, Vlad Ciobanu, Valentin Cristea, Digital Certificate Management for Document Workflows in e-Government Services, in Proc. of the IFIP WG 8.5 international conference on Electronic government (EGOV'10), 2010, pp. 363-374, Ed. Springer-Verlag.
- [38] Andreea Marin, Irina Constantinescu, Ciprian Dobre, Dana Boldeanu, Valentin Cristea, e-System for Public Administration Reporting Services, in Proc. of the Developments in E-systems Engineering (DESE 2010) Conference, 2010, pp. 249-253, IEEE Computer Society.
- [39] Ciprian Dobre, Florina Constantin, Florin Pop, Valentin Cristea, A Security Simulation Model for Large Scale Distributed Systems, in Proc. of the European Simulation and Modelling Conference (ESM'2010), 2010, pp. 45-51, ISBN: 978-90-77381-57-1, EUROSIS-ETI.
- [40] Andreea Marin, Ciprian Dobre, Decebal Popescu, Valentin Cristea, e-System for Automatic Data Migration, in Proc. of the 1st Workshop on Software Services (WoSS), 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), 2010, pp. 479-485, IEEE Computer Society.
- [41] Alexandru Costan, Florin Pop, Ciprian Dobre, Valentin Cristea, A Workflow Management Platform for Scientific Applications in Grid Environments, in Proc. of the International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), 2010, pp. 261-269, IEEE Computer Society .
- [42] Catalin Gosman, Ciprian Dobre, Valentin Cristea, A Security Protocol for Vehicular Distributed Systems, in Proc. of the International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), 2010, pp. 321-330, IEEE Computer Society.
- [43] Adriana Szekeres, Silviu Horia Baranga, Ciprian Dobre, Valentin Cristea, A Keyword Search Algorithm for Structured Peer-to-Peer Networks, in Proc. of the International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC 2010), 2010, pp. 253-261, IEEE Computer Society .
- [44] Bogdan Eremia, Ciprian Dobre, Florin Pop, Alexandru Costan, Valentin Cristea, Simulation model and instrument to evaluate replication techniques, in Proc. of the International Workshop on Simulation and Modelling of Emergent Computational Systems (SMECS 2010), International Conference on P2P, Paralel, Grid, Cloud and Internet Computing (3PGCIC 2010), 2010, pp. 541-547.
- [45] Ciprian Dobre, Florin Pop, Valentin Cristea, A fault-tolerant approach to storing objects in distributed systems, in Proc. of the International Conference on P2P, Paralel, Grid, Cloud and Internet Computing (3PGCIC 2010), 2010, pp. 1-8, IEEE Computer Society. (best paper award)
- [46] Codrut Grosu, Eliana-Dina Tirsa, Ciprian Dobre, Valentin Cristea, Mugurel Ionut Andreica, Scalable Chord-based, Cluster-enhanced Peer-to-Peer Architecture supporting Range Queries, in Proc. of the 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011), Cluj-Napoca, Romania, July 2011.
- [47] Mihai Dascalu, Ciprian Dobre, Stefan Trausan-Matu, Valentin Cristea, Beyond Traditional NLP: A Distributed Solution for Optimizing Chat Processing, in Proc. of the 10th International Symposium on Parallel and Distributed Computing (ISPDC 2011), Cluj-Napoca, Romania, July 2011.
- [48] Cristian Giumale, Lorina Negreanu, Matei Popovici, Mihnea Muraru, Alexandru Agache, Ciprian 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, July 2011.
- [49] Ciprian Dobre, Catalin Fratila, Liviu Iftode, An approach to Evaluating Usability of VANET Applications, in Proc. of 7th International Wireless Communications and Mobile Computing Conference (IWCMC-2011), Istanbul, Turkey, July 2011.
- [50] Vlad-Alexandru Dragoi, Ciprian Dobre, A Model for Traffic Control in Urban Environments, in Proc. of 7th International Wireless Communications and Mobile Computing Conference (IWCMC-2011), Istanbul, Turkey, July 2011.
- [51] Matei Popovici, Cristian Giumale, Lorina Negreanu, Alexandru Agache, Mihnea Muraru, Ciprian 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.
- [52] Ciprian Dobre, Florin Pop, Valentin Cristea, A Virtualization-based Approach to Dependability for Service Computing, in Proc. of 2nd Workshop on Software Services: Cloud Computing and Applications based on Software Services (2nd WoSS), Timisoara, Romania, June 2011.



- [53] Florin Pop, Marius-Viorel Grigoras, Ciprian Dobre, Ovidiu Achim, Valentin Cristea, Load-Balancing Metric for Service Dependability in Large Scale Distributed Environments, in Proc. of 2nd Workshop on Software Services: Cloud Computing and Applications based on Software Services (2nd WoSS), Timisoara, Romania, June 2011.
- [54] Ciprian Dobre, Florin Pop, Valentin Cristea, Joanna Kolodziej, 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.
- [55] Florin Pop, Mugurel Andreica, Ciprian Dobre, Răzvan Rughinis, Alin Moldoveanu, Costin 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.
- [56] Radu Ciobanu, Ciprian 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.
- [57] Cristian Giumale, Lorina Negreanu, Mihnea Muraru, Matei Popovici, Alexandru Agache, Ciprian 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.
- [58] Lorina Negreanu, Cristian Giumale, Alexandru Agache, Mihnea Muraru, Matei Popovici, Ciprian 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.
- [59] Mihnea Muraru, Alexandru Agache, Matei Popovici, Ciprian Dobre, Modeling of Standards and the Open World Assumption, in Proc. of Future Business Technology (FUBUTEC 2011), London, UK, pp. 5-17, April 2011.
- [60] Ciprian Dobre, George Cristian 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.
- [61] Matei Popovici, Mihnea Muraru, Alexandru Agache, Lorina Negreanu, Cristian Giumale, Ciprian Dobre, An ontology-based dynamic service composition framework for intelligent houses, in Proc. of 10th International Symposium on Autonomous Decentralized Systems (ISADS 2011), Kobe, Japan, June 2011.