

# Mariagrazia Fugini

## *Selected Publications 2006-2012*

### 2012

1. A. Kipp, T. Jiang, M.G Fugini, I. Salomie, "Layered Green Performance Indicators", *Future Generation Comp. Syst.* 28(2): 478-489 (2012)
2. A. Kipp, T. Jiang, J. Liu, M.G. Fugini, M. Vitali, B. Pernici, I. Salomie, "Applying Green Metrics to optimise the energy-consumption footprint of IT service centres", accepted for in *International Journal of Space-Based and Situated Computing*

### 2011

1. M.G. Fugini, C. Raibulet, L. Ubezio, "Risk Assessment in Work Environments: Modelling and Simulation", *Wiley Journal on Concurrency and Computation: Practice and Experience*, to appear 2011
2. M.G. Fugini, C. Raibulet, "A Self-Healing Approach to Risk Management in Work Environments", *ERCIM News No. 84. Intelligent and Cognitive System*, January 2011
3. M.G. Fugini, A. Kipp, T. Jiang, "Green Metrics for energy-aware IT systems", *5th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS-2011)*, June 30th-July 2nd, 2011 Seoul, Korea, pp. 241-248
4. M.G. Fugini, C. Raibulet, "Service-Oriented Architecture for Risk Management", *Proc. 11th Int. Conf. on New Technologies of Distributed Systems NOTERE'11*, Paris, May 10 – 12, 2011
5. C. Cappiello, M.G. Fugini, A. Mello Ferreira, B. Pernici, P. Plebani, "Application Driven IT Service Management for Energy Efficiency", *Proceedings of 2011 SIGGreen Workshop. Sprouts: Working Papers on Information Systems*, 10(131). <http://sprouts.aisnet.org/10-131>
6. M.G. Fugini, G. Hadjichristofi, C. Raibulet, "Trusted Services for Risk Management in Work Environments", *Fifth FTRA IEEE International Conference on Multimedia and Ubiquitous Engineering (MUE'11)*, Crete, June 28-30, 2011
7. M.G. Fugini, C. Raibulet, S. Pinaridi, "Smart Solutions for Risk Prevention through Analysis of Persons' Movements", in *Grid and Pervasive Computing*, International Workshops, S3E, in Conjunction with GPC 2011, Oulu, Finland, May 11-13, 2011. LNCS, Vol. 7096, Rautiainen, M.; Korhonen, T.; Mutafungwa, E.; Ovaska, E.; Katasonov, A.; Evesti, A.; Ailisto, H.; Quigley, A.; Häkkinä, J.; Milic-Frayling, N.; Riekkilä, J. (Eds.) 2012
8. M.G. Fugini, R. Israëls, C. Raibulet, F. Ramoni, "Simulation of Risks for Monitoring and Prevention", *International Conference on Software Engineering and Knowledge Engineering (SEKE 2011)*, Miami, July 7 - 9, 2011
9. M.G. Fugini, C. Raibulet, F. Ramoni, "Preventing Risks in Work Environments: Modeling Concepts and Simulation", *26<sup>th</sup> International Symposium on Computer and Information Sciences (ISCIS2011)*, London, September 26-28, 2011, in *Computer and Information Sciences II*, E. Gelenbe, R. Lent and G.Sakellari Editors, Springer, pp. 425-431
10. C. Cappiello, M.G. Fugini, A. Mello Ferreira, B. Pernici, P. Plebani, M. Vitali, "Business Process Co-Design for Energy-Aware Adaptation", *IEEE International Conference on Intelligent Computer Communication and Processing (ICCP2011)*, Special Session on Green Computing, Cluj-Napoca, Romania, August 25 - 27, 2011
11. M.G. Fugini, G. Hadjichristofi, "Security and Trust in Cloud Scenarios", *1st IEEE International Workshop on Securing Services on the Cloud, In conjunction with the 5<sup>th</sup> int. Conf. on Network and System Security (NSS2011)*, Milano, Sept. 7, 2011

12. A. Barenghi, G.M. Bertoni, L. Breveglieri, M.G. Fugini, G. Pelosi, "Smart Metering in Power Grids: Application Scenarios and Security", 1st *IEEE PES Innovative Smart Grid Technologies (ISGT) Asia Conf.*, Perth, November 13-16, 2011

## 2010

1. C. Cappiello, M.G. Fugini, A. Mello Ferreira, B. Pernici, P. Plebani, "Application Driven IT Service Management for Energy Efficiency", *SIGGreen Workshop, International Conference on Information Systems (ICIS) 2010*, St. Louis December 12 - 15, 2010
2. M.G. Fugini, G. Hadjichristofi, "A Dynamic Web Service-based Trust and Reputation Scheme for Scientific Workflows", in *12th International Conference on Information Integration and Web-based Applications & Services (iiWAS2010)*, Paris, Nov. 8-10, 2010, pp. 56-63
3. C. Cappiello, M.G. Fugini, G.R. Gangadharan, A. Mello Ferreira, B. Pernici, P. Plebani, "First-Step toward Energy-Aware Adaptive Business Processes. *OTM Workshops 2010*: Athens, Greece, November, 2010, pp. 6-7
4. M.G. Fugini, G.R. Gangadharan, B. Pernici, "Designing and Managing Sustainable IT Service Systems", in *Competitive and Sustainable Manufacturing, Product and Services (APMS) Conf. 2010*, Cernobbio, Italy, Oct. 11-13, 2010
5. C. Cappiello, M.G. Fugini, B. Pernici, P. Plebani, "Green Information Systems for Sustainable IT", in *Information Technology and Innovation Trends in Organizations (ITAIS'10)*, Naples - Italy- Oct. 8-9, 2010, to appear in LNCS.
6. M.G. Fugini, C. Raibulet, F. Ramoni, "A Prototype for Risk Prevention and Management in Working Environments", in *Information Technology and Innovation Trends in Organizations (ITAIS'10)*, Naples - Italy- Oct. 8-9, 2010, to appear in LNCS.
7. C. Cappiello, M.G. Fugini, B. Pernici, P. Plebani, "Efficienza Energetica nei Sistemi Informativi: l'approccio GAMES", *AICA Conf.*, L'Aquila, 28-30 Sett. 2010
8. V. Andrikopoulos, M.G. Fugini, M. P. Papazoglou, M. Parkin, B. Pernici, H. Siadat, "QoS Contracts Formation and Evolution", in *11th International Conference on Electronic Commerce and Web Technologies (EC-Web 2010)*, Bilbao, Aug.30-Sept.3, 2010, pp. 119-130
9. M.G. Fugini, C. Raibulet, L. Ubezio, "Risk Characterization and Prototyping", *Proc. 10th Int. Conf. on New Technologies of Distributed Systems NOTERE'10*, Tozeur, Tunisia, May 31-June 2, 2010, pp. 57-64
10. M.G. Fugini, C. Raibulet, L. Ubezio, "A Web-Service Architectural Perspective on Risk Management in Work Environments", *Proc. 2010 Workshop Living experience through the web (Web2Touch)*, in conjunction with NOTERE'2010, May 29 - 30, 2010, Tozeur - Tunisia, pp. 327-332
11. G. Friedrich, M.G. Fugini, E. Mussi, B. Pernici, G. Tagni, "Exception Handling for Repair in Service-Based Processes", *IEEE Transactions on Software Engineering*, vol.36, n. 2, pp.198-215, 2010
12. M.G. Fugini, P. Maggiolini, B. Pagamici, "Perché è Difficile Fare Vero E-Government, in *Etica e Responsabilità Sociale delle Tecnologie dell'Informazione*, vol.2- Etica ed Internet, F. Angeli editore, collana Informatica e Organizzazione, pp.131-146, 2010

## 2009

1. Celino, D. Cerizza, M. Cesarini, E. Della Valle, F. De Paoli, J. Estublier, M.G. Fugini, A. Gómez Pérez, M. Kerrigan, P. Guarrera, M. Mezzanica, J. Ramirez, B. Villazon, and G. Zhao, *SEEMP: A Networked Marketplace for Employment Services, Semantic Technologies for E-Government: A European Perspective*, 2009 *Semantic Technologies for E-Government Springer*, 2010, Part 2, pp. 151-183
2. M.G. Fugini, B. Pernici, F. Ramoni, "Quality Analysis of Composed Services Through Fault Injection", *Information System Frontiers*, Special Issue on Collaborative Business Processes, Volume 11, Issue 3 (2009), pp. 227- 239

3. M.G. Fugini, H.Siadat, "SLA Contract for Cross-layer Monitoring and Adaptation", in *BPM Workshops, event driven BPM (edBPM) Workshop, Ulm Sept. 2009, Lecture Notes in Business Information Processing*, 2010, Volume 43, Part 5, pp. 412-423
4. M.G. Fugini, P. Maggiolini, C. Raibulet, L. Ubezio, "Reflections on Web-Oriented Architectures for Risk Management", in *Web Intelligence and Intelligent Agent Technologies, 2009. WI-IAT '09. IEEE/WIC/ACM International Joint Conferences on, E-Government and Emergency Management (EGOVEM) Workshop*, Milan, 15-18 Sept. 2009, pp. 361-364
5. G.M. Conti, F. Rizzo, M.G. Fugini, C.Raibulet, L.Ubezio, "Wearable Services in Risk Management", in *Web Intelligence and Intelligent Agent Technologies, 2009. WI-IAT '09. IEEE/WIC/ACM International Joint Conferences on*, Milan, 15-18 Sept. 2009, pp. 563-566
6. M.G. Fugini, P. Maggiolini, C. Raibulet, L. Ubezio, "Risk Management through Real-Time Wearable Services", in *Proc of the 4<sup>th</sup> International Conference on Software Engineering Advances (ICSEA 2009)*, Porto, 20-25 Sept. 2009, pp. 163-168
7. The WS-Diamond Team, "WS-DIAMOND Web Services – DIAGNOSABILITY, MONITORING AND DIAGNOSIS", *At your service: An overview of results of projects in the field of service engineering of the IST program MIT Press Series on Information Systems*, E. Di Nitto, J. Mylopoulos, M. Papazoglou (Eds.), June 2009
8. M.Cesarini, M. Fugini, P. Maggiolini, M. Mezzanzanica, R. Salvador Valles, "The Neglected Problem: How to Really Benchmark the Effectiveness of ICT Based Services? A Case Study", *Proc. 14th conference of AIM (Association Information and Management)*, Marrakech, 10 -12 June 2009
9. M.G. Fugini, "A Service Integration Platform for the Labor Market", *Proc. ICEIS Conf., Milano, 6-10 May 2009, Lecture Notes in Business Information Processing, 2009, Volume 24, III, pp. 445-455, Best Paper Award in the Information Systems Analysis and Specification Area* [http://www.iceis.org/Previous\\_Awards.htm](http://www.iceis.org/Previous_Awards.htm)
10. N. Dessì, M.G. Fugini, B. Pes, "A Distributed Trust and Reputation Framework for Scientific Grids", *Proc. RCIS'09 Conf., Fez, 22-24 April 2009*, pp. 265-274
11. F. Buccafurri, P. De Meo, M. Fugini, R. Furnari, A. Goy, G. Lax, P. Lops, S. Modafferi, B. Pernici, D. Redavid, G. Semeraro, D. Ursino, "A Framework for Using Web Services to Enhance QoS for Content Delivery", *IEEE Multimedia Magazine, Special Issue Intelligent Pervasive Multimedia Systems*, January-March 2009, pp. 26-35

## 2008

1. F. Buccafurri, P. De Meo, M. Fugini, R. Furnari, A. Goy, G. Lax, P. Lops, S. Modafferi, B. Pernici, D. Redavid, G. Semeraro, D. Ursino, "Analysis of QoS in Cooperative Services for Real Time Applications", *Data & Knowledge Engineering*, Volume 67, Issue 3, December 2008, Pages 463-484, Elsevier Publisher
2. Bosin, N. Dessì, M. G. Fugini, B. Pes, "Cooperative E-Organizations for Distributed Bioinformatics Experiments", *Proc. 9th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL 2008)*, Daejeon, Korea, November 2-5, 2008, LNCS, vol. 5326, Springer 2008, pp. 306-313
3. M. Comuzzi, M.G. Fugini, S.Modafferi, "Quality Contracts for Cooperative Services and Associated Resources", *Collaborative Business Processes (CBP) Workshop – 6th International Conference on Business Process Management (BPM 2008)*, Milan, 1-4 September 2008, pp. 561-572
4. M. Cesarini, M.G. Fugini, P. Maggiolini, M. Mezzanzanica, K. Nanini, "A Solution to Knowledge Management in Information-Based Services Based on Cooperation, A Case Study Concerning Work Market Services", in *Interdisciplinary Aspects of Information systems Studies*, A.D'Atri, M.De Marco, N. Casalino (Eds.), Physica-Verlag, Springer, 2008, pp. 189- 196
5. O. Nabuco, R. Ben Halima, K. Drira, M.G. Fugini, S. Modafferi, E. Mussi, "Model-based QoS-enabled Self-Sealing Web Services", *DEXA 2008 Workshop - First International Workshop on Engineering Non-Functional Information for Emerging Systems (EN-FINES'08)*, Turin, September, 1st-5th, 2008, pp. 711-715

6. A. Bosin, N. Dessì, M.G. Fugini, D. Liberati, "Open Source Environments for Collaborative Experiments in e-Science," *IFIP Fourth International Conference on Open Source Systems (OSS 2008)*, IFIP World Computer Congress, Milano Sept. 7-10, 2008, pp. 415-416
7. N. Dessì, M.G. Fugini R. A. Balachandar, "Policies and Security Aspects for Distributed Scientific Laboratories", *Proc. of the IFIP TC 11 23rd International Information Security Conference, (SEC 2008)*. IFIP World Computer Congress, Milano Sept. 7-10, 2008 , pp- 221-235
8. C. Argiolas, N. Dessì, M.G. Fugini, "Modeling Trust Relationships in Collaborative Engineering Projects", *Proc. 7th International Workshop on Conceptual Modeling Approaches for e-Business , 22-25 April 2008*, Klagenfurt, Information Systems and e-Business Technologies LNCS, Volume 5, Part 4, pp. 555-566
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2. M.G. Fugini, "A Security Model and Architecture for Multichannel E-Government Systems", *Proc. 1st International Conf. on Availability, Reliability and Security (AReS'07)*, Vienna, April, 2007, pp.917-924
3. F. Amigoni, M.G. Fugini, D. Liberati, "Design and Execution of Distributed Experiments, *Proc. 9th International Conference on Enterprise Information Systems, (ICEIS'07)*, Madeira, June 2007, pp.227-230
4. M.G. Fugini, B. Pernici, "A Security Framework for Self-Healing Services", *Proc. 5th CAiSE UMICS'07 Workshop*, Trodheim, June 2007
5. WS-Diamond Team, "WS-DIAMOND: an approach to Web Services – DIAGNOSABILITY, MONITORING and DIAGNOSIS", *Proc. E-Challenges Conference*, IOS Press, The Hague, October 2007, pp. 1-8
6. M. Cesarini, I. Celino, D. Cerizza, E. Della Valle, F. De Paoli, J. Estublier, M.G. Fugini, P. Guarrera, M. Kerrigan, M. Mezzanica, Z. Gutowsky, J. Ramirez, B. Villazón, G. Zhao, "SEEMP: A Marketplace for the Labour Market", *Proc. E-Challenges Conference*, IOS Press, The Hague, October 2007, pp. 1-8
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10. M.Cesarini, M.G. Fugini, P. Maggiolini, M.Mezzanica, K.Nanini, "Coopetition: a Solution to Knowledge Management Problems in Information-based Services? A Case Study Concerning Work Market Services", *Proc. XVII International RESER Conference, 13-15th September 2007, Tampere Hall, Tampere, Finland*

11. M.G. Fugini, B. Pernici, F. Ramoni, "Quality Analysis of Composed Services through Fault Injection", Proc. CBP'2007 International Workshop on Collaborative Business Processes, Brisbane Australia September 2007, in Lecture Notes in Computer Science Springer Berlin / Heidelberg 0302-974, Volume 4928/2008 "Business Process Management Workshops" 2008, pp.245-256
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15. M.G. Fugini, P. Maggiolini, B. Pagamici, "Perchè è difficile fare vero Governo Elettronico", Sviluppo&Organizzazione, 2007
16. F. Buccafurri, L.Console, P. De Meo, M.G. Fugini, A.Goy, G.Lax, P.Lops, S. Modafferi, B.Pernici, C.Picardi, D. Redavid, G.Semeraro, D.Ursino, "Modellazione della QoS in Ambienti Web-Service con Applicazioni di Video Streaming", Proc. SEBD'07, pp.298-307, Brindisi, Giugno 2007, pp. 298-307

## 2006

1. A.Bosin, N. Dessì, M.G. Fugini, D. Liberati, B. Pes, "Supporting Distributed Experiments in Cooperative Environments", Proc. Intl. Workshop on Enterprise and Networked Enterprises Interoperability, ENEI'2005, Nancy, France, September, 2005, in Springer-Verlag Berlin/Heidelberg, Business Process Management, Lecture Notes in Computer Science 3812, Christoph Bussler, Armin Haller (Ed.s), pp. 281 – 292, vol. 25, 2006
2. M. Cesarini, M.G. Fugini, P. Mariani, M. Mezzanica, K. Nanini, "Customer Communication Management: The Case Study of the Italian Employment Information System, Proc. IADIS WWW/Internet Conference, Murcia (Spain), October 2006
3. M.G. Fugini, M. Mezzanica, M. Cesarini, "Analysis-sensitive Conversion of Administrative Data into Statistical Information Systems, Poster Paper, 8th International Conference on Enterprise Information Systems (ICEIS 2006), Cyprus, May 2006, pp. 293-296
4. M. Cesarini, M.G. Fugini, P. Maggiolini M. Mezzanica, K. Nanini, "The Italian E-Government Plans: Experiences in the Job Marketplace and in Statistical Information Systems", Proc. European Conference on E-Government (ECEG 2006), Marburg, April 2006
5. M.G. Fugini, E. Mussi, "Recovery of Faulty Web Applications through Service Discovery", Proc. 1<sup>st</sup> SMR-VLDB Workshop, Matchmaking and Approximate Semantic-based Retrieval: Issues and Perspectives, 32nd International Conference on Very Large Databases, Seoul, Korea, September 2006, pp. 67-80
6. M.G. Fugini, P. Plebani, F. Ramoni, "A User Driven Policy Selection Model", Proc. ICSOC Conference'06, Chicago, December 2006, pp. 427-433
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8. M. Cesarini, M.G. Fugini, M. Mezzanica, K. Nanini, "Security Issues in Distributed Web Based Transactions: an Overview on the Italian Employment Information System", in Encyclopedia of Public

*Information Technology*, G. David Garson and Mehdi Khosrow-Pour, (Eds.), November 2006, pp.245-250

**Patent: *Dynamic task assignment in workflows -2006***

*Patent number:* 7155720 *Issue date:* 26 Dec 2006 *Inventors:* F.Casati, S.Castano, M.G.Fugini

*Assignee:* Hewlett-Packard Development Company, L.P.

*U.S.Classification* 718/104; 718/100; 718/102

<http://www.google.it/patents?hl=it&lr=&vid=USPAT7155720&id=DF9-AAAAEBAJ&oi=fnd&dq=castano+autore:s-castano>

*Description:* A method of assigning resources to nodes in a workflow. In one embodiment, a plurality of nodes are defined. Each of the nodes is a task to be executed within the workflow. In the present embodiment, resources are defined to perform the execution of the nodes. In the present embodiment, a set of data items is stored. The stored data items comprise variables pertaining to workflow execution in the workflow. In the present embodiment, those defined resources are assigned to execute each of the nodes, according to a set of rules. In the present embodiment, the set of rules is for controlling the execution of the workflow.

**Books in Italian (Text Books)**

D. Ardagna, M.G. Fugini, B. Pernici, P. Plebani, *Sistemi Informativi Basati su Web*, collana Sistemi Informativi, Franco Angeli, Volume VI, 2006

F. Amarilli, D. Ardagna, M.G. Fugini, R. Tedesco, *Impianti Informatici. Tecnologie e Applicazioni*, McGraw-Hill Italia, 2007