PERSONAL INFORMATION	**Giuliana Annamaria Franceschinis**
INSTITUTION	Università del Piemonte Orientale

Dipartimento di Scienze e Innovazione Tecnologica
Viale T. Michel 11, 15121 Alessandria (AL), Italia
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WORK EXPERIENCE

Since September 2013 — Responsible for the Computer Science BS and MS degrees curricula (Presidente del Consiglio di Corso di Laurea e Laurea Magistrale in Informatica)
Università del Piemonte Orientale

November 2007 – October 2010 — Vice-Dean "Facoltà di Scienze Matematiche Fisiche e Naturali"
Università del Piemonte Orientale

November 2007 – October 2010 — Director "Dipartimento di Informatica"
Università del Piemonte Orientale

Since November 2002 — Full professor of Computer Science
Università del Piemonte Orientale

November 1998 - October 2002 — Associate professor of Computer Science
Università del Piemonte Orientale

November 1992 - October 1998 — Assistant professor of Computer Science
Università di Torino

Teaching: BS and MS degrees in Computer science
Research: Formal methods for Performance and Reliability Evaluation
Sector: Higher Education and Research

February 1992 – July 1992 — Visiting Scholar
University of California at Los Angeles, Computer Science Department

Sector: Research

1988-1989 — Employee
Software development (control software for measurement devices)

Sector: Industry

1986-1987 — Researcher
Research on Asynchronous Transfer Mode and on parallel computation platforms

CSELT (Telecom Italia Lab)

Sector: Telecommunications Research

1981 –1985 — Freelance IT professional
Software development

Sector: Financial services

EDUCATION AND TRAINING

1989-1992	**PhD in Computer Science**
	Università di Torino (Joint PhD Program Univ. di Torino – Univ. di Milano)
1981-1986	**Laurea in Scienze dell'Informazione (cum laude)**
	Università di Torino

PERSONAL SKILLS

Mother tongue(s)   Italian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English				
C1	C1	C1	C1	C1
French				
A2	B1	A2	A2	A2

RESERCH ACTIVITY

Theory of Stochastic Petri Nets and High Level Stochastic Petri Nets
Dependability analysis with Fault Trees, Petri Nets and Bayesian Networks.
Development of methodologies and software tools for the qualitative and quantitative evaluation of discrete event dynamic systems.
Co-author of more than a hundred papers in international journals, international conferences with peer review and contributions in books, as well as the book "Modelling with Generalized Stochastic Petri Nets", published by John Wiley.

VISITING PROFESSOR

July 2006	Visiting professor at the Université de Paris Dauphine for one month (invited by Prof.Serge Haddad, LAMSADE)
July 2010	Visiting professor at the Université de Savoie (Polytech'Savoie, Annecy) for one month (invited by Prof. Patrice Moreaux, LISTIC)

PROJECTS

June 1989-June 1994	Progetto Finalizzato Informatica CNR, Sistemi Informatici e Calcolo Parallelo, Sottoprogetto 3: architetture parallele, Obiettivo: modelli e strumenti per architetture a parallelismo massiccio
October 1992-September 1995	ESPRIT BRA (Basic Research Action) Project: Quantitative Modelling in Parallel Systems,
November 1994-October 1998	European Community HCM (Human Capital and Mobility) Project: Modelling and Analysis of Time Constrained Hierarchical Systems (MATCH),
October 1998-September 2000	European Community ESPRIT Project: Tallorable fault toleRANce frameworks for embedded applications (TIRAN), Ottobre 98-Settembre 2000.
November 2000-November 2002	Progetto italiano COFIN ISIDE: SISTEMI DI ELABORAZIONE REATTIVI ED AFFIDABILI PER APPLICAZIONI INDUSTRIALI,
November 2002-November 2005	Progetto italiano FIRB PERF: Performance Evaluation of Complex Systems: Techniques, Methodologies and Tools (http://www.perf.it/)

November 2002-November 2005	Progetto italiano "FIRB" WebMinds: Wide-scalE Broadband MIddleware for Network Distributed Services (http://web-minds.consorzio-cini.it/)
November 2004-November 2006	Progetto EU "Leonardo da Vinci" e-District CiPro: European DIStance Training Interactive and Collaborative Tools for the Civil Protection (progetto biennale nel framework EU Leonardo da Vinci
January 2006-March 2009	EU IST-FP6 Project CRUTIAL: CRitical UTility InfrastructurAL Resilience (European research project n. 027513, FP6-2004-IST-4, under the strategic objective 2.4.3 Towards a global dependability and security framework.) Jan.2006-Mar.2009
2008	Galileo project 2008 "Methods for performance and dependability analysis: stochastic and non deterministic models. Applications to critical infrastructures. " (programma di scambio Francia-Italia) in cooperation with Prof. Serge Haddad, ENS-Cachan.
October 2008-September 2010	Progetto italiano PRIN WiSeDeMon: Wireless Sensor Networks for Dependable Monitoring of Critical Applications, Oct. 2008 - Sept. 2010

OTHER PROFESSIONAL
ACTIVITIES

Referee for several international journals (Performance Evaluation, Journal of Discrete Event Dynamic Systems, Journal of Systems and Software, IEEE Tr. on Robotics and Automation, IEEE Multimedia, IEEE Tr. on Networking, Simulation Modelling Practice and Theory, Software Tools for Technology Transfer, IEEE Tr. on Computers, IEEE Tr. on Software Engineering, , IEEE Tr. on Reliability, IEEE Tr. On Systems Man and Cybernetics, ACM Tr. On Modelling and Performance Evaluation of Computing Systems, Performance Evaluation, Transactions on Petri Nets and other Models of Concurrency) and conferences (Int. Conf. on Application and Theory of Petri Nets, Int. Workshop on Petri Nets and Performance Models, Int. Conf. Quantitative Evaluation of Systems, Int. Conf. on Modelling Tools and Techniques for Computer Performance, Evaluation, Sigmetrics, Int. Conf. on Dependable Systems and Networks, Int. Conf. on Tools and Algorithms for the Construction and Analysis of Systems, Int. Conf. on Performance Evaluation Methodologies and Tools).

PC member of Int. Conf. on Application and Theory of Petri Nets, Int. Workshop on Petri Nets and Performance Models, Sigmetrics, Workshop on Modelling of Objects, Components, and Agents, Int. Conference on the Quantitative Evaluation of Systems, Int. Conf. on Performance Evaluation Methodologies and Tools

Program committee co-chair of the 1st International Conference on Quantitative Evaluation of SysTems (QEST 2004) and of the 30th Int. Conference on Application and Theory of Petri Nets and other Models of Concurrency (Petri Nets 2009).

Invited speaker at the Third workshop and Tutorial on Practical Use of Coloured Petri Nets and the CPN Tools, Aarhus, Denmark, August 2001; at the 26th International Conference on Applications and Theory of Petri Nets, ATPN 2005, Miami, Florida, USA; at the 9th Winter Simulation Conference, special track on Petri nets, simulation and applications, Berlin, Germany, December 2012; at the conference ACM SIGSIM-PADS 2013 Montral, Quebec, CANADA, May 2013;

Teacher at the Advanced course on Petri Nets, Schloss Dagstuhl, Wadern, Germany, October 1996; at the MATCH school on Performance Models for Discrete Event Systems with Synchronizations: Formalisms and Analysis Techniques, Jaca, Spain, September 1998; at the Advanced School on Petri Nets, Rostock, Germany, September 2010;

PUBLICATIONS

L. Capra, M. De Pierro and G. Franceschinis. Computing structural properties of Symmetric Nets, Proc. of the 12th Int. Conf. on Quantitative Evaluation of Systems, QEST 2015, Madrid, Spain, 1-3, Sept. 2015, pag. 125-140, LNCS 9259, Springer,

M. Beccuti, E. Amparore, S. Donatelli,D. Scheftelowitsch, P. Buchholz, G. Franceschinis, Markov Decision Petri Nets with Uncertainty, Proc. of the 12th EuropeanWorkshop on Computer Performance Engineering, EPEW 2015, Madrid, Spain, 31 Aug-1 Sept. 2015, pag. 177-192, LNCS 9272, Springer.

M. Beccuti, G. Franceschinis, J. Sproston. Modeling and Verification of Distributed Systems using Markov Decision Processes. pag. 1-26, Chapter in "Quantitative Assessments of Distributed Systems", D. Bruneo and S. Distefano Eds., John Wiley & Sons, Inc. 2015

M. Beccuti, G. Franceschinis, D. Codetta-Raiteri and S. Haddad. Computing Optimal Repair Strategies by means of NdRFT Modelling and Analysis. The Computer Journal, Oxford University Press. Published online Dec. 2013.

M. Beccuti, S. Chiaradonna, F. Di Giandomenico, S. Donatelli, G. Dondossola, G. Franceschinis. A model based approach for the evaluation of cyber attacks to the electrical grid. Chapter 14 in book Model-Based Evaluation of the Impact of Attacks to the Telecommunication Service of the Electrical Grid. Sandro Bologna and Paul Theron Editors. IGI Global, 2013.

M. Beccuti, Silvano Chiaradonna, Felicita Di Giandomenico, Susanna Donatelli, Giovanna Dondossola, Giuliana Franceschinis Quantification of Dependencies between Electrical and Information Infrastructures International Journal of Critical Infrastructure Protection, Vol. 5, N. 1, March 2012, Elsevier.

E. G. Amparore, P. Ballarini, M. Beccuti, S. Donatelli and G. Franceschinis Expressing and computing passage time measures of GSPN models with HASL Proceedings of International Conference on application and theory of Petri nets and other models of concurrency (ICATPN'13). June 24-28, 2013, Milano, Italy.

E. G. Amparore, B. Barbot, M. Beccuti, S. Donatelli and G. Franceschinis. Simulation-based Verification of Hybrid Automata Stochastic Logic Formulas for Stochastic Symmetric Net models. Proceedings of ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (PADS13), pages 253-264, Montreal, Canada, 19-22 May, 2013.

M. Beccuti and G. Franceschinis Efficient simulation of Stochastic Well-Formed Nets through symmetry exploitation. Proceedings of Winter Simulation Conference (WSC12), paper 296, 13 pages, Berlin, Germany, 9-12 December, 2012.

M. Beccuti, G. Franceschinis, S. Haddad MDWNsolver: A Framework to Design and Solve Markov Decision Petri Nets International Journal on Performability engineering, Vol.7, N.5, September 2011 (Special issue on Performance and Dependability Modeling of Dynamic Systems)

S. Baarir, M. Beccuti, C. Dutheillet, G. Franceschinis, S. Haddad Lumping Partially Symmetrical Stochastic Models, Performance Evaluation, Elsevier, Volume 68, Issue 1, January 2011.

G. Balbo, M. Beccuti, M. De Pierro, G. Franceschinis First Passage Time Computation in Tagged GSPN with Queue Places The Computer Journal, Oxford University Press, Vol. 54, N. 5, May 2011

Giuliana Franceschinis, Pier Luigi Ingrassia, Marco Tengattini, Francesco Della Corte, E-learning e alta formazione in medicina dei disastri: l'esperienza dello European Master in Disaster Medicine, in Didattica on-line nell'Università: teorie, esperienze e strumenti, ScriptaWeb, 2011.

G. Balbo, M. Beccuti, M. De Pierro and G. Franceschinis. On the importance of token scheduling policies in Stochastic Petri nets. Proc. of the Int. Conf. on Operations Research (OR2010) Munich, Germany, Sept. 2010

M. Beccuti, V. Fragnelli, G. Franceschinis and S. Villa. Dynamic simulations of kidney exchanges. Proc. of the Int. Conf. on Operations Research (OR2010) Munich, Germany, Sept. 2010

A. Valmari, G. Franceschinis Simple O(m log n) Time Markov Chain Lumping.16th Int. Conf. on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2010, Paphos, Cyprus, March 2010 pag. 38-52

S. Baarir, M. Beccuti, D. Cerotti, M. De Pierro, S. Donatelli, G. Franceschinis . The GreatSPN tool: recent enhancements. ACM Performance Evaluation Review,Vol. 36, N. 4, March 2009

M. Beccuti, G. Franceschinis, D. Codetta-Raiteri, S. Haddad, Parametric NdRFT for the derivation of optimal repair strategies, Proc. Int. Conference on Dependable Systems and Networks – Performance and Dependability Symposium DSN-PDS 2009, Estoril, Lisbon, Portugal, 29 June-2 July 2009

S. Baarir, M. Beccuti, D. Cerotti, M. De Pierro, S. Donatelli, G. Franceschinis, The GreatSPN tool: recent enhancements. ACM Performance Evaluation Review, Vol. 36, N. 4, March 2009 36, N. 4, March 2009

M. Beccuti, G. Franceschinis, D. Codetta-Raiteri, S. Haddad, Parametric NdRFT for the derivation of optimal repair strategies, Proc. Int. Conference on Dependable Systems and Networks – Performance and Dependability Symposium DSN-PDS 2009, Estoril, Lisbon, Portugal, 29 June-2 July 2009

M. Beccuti, G. Franceschinis, S. Donatelli, S. Chiaradonna, F. Di Giandomenico, P. Lollini, G. Dondossola, F. Garrone, Modeling dependencies in the Electrical and Information Infrastructure: the CRUTIAL approach, Fourth International CRIS conference on Critical Infrastructures, CRIS 2009, Linkping, Sweden, 28-30 April 2009

G. Balbo, M. De Pierro, G. Franceschinis, Tagged Generalized Stochastic Petri Nets, Proc. 6th European Performance Engineering Workshop, London, UK, 9-10 July 2009

Marco Beccuti, Alessio Bottrighi, Giuliana Franceschinis, Stefania Montani, Paolo Terenziani, Modeling Clinical Guidelines through Petri Nets. AIME 2009: 61-70

A. Baarir, M. Beccuti, G.Franceschinis. New solvers for asymmetric systems in GreatSPN. In: Proc. of the 5th Int. Conf. on Quantitative Eval. of Systems. St. Malo, France, Sept. 2008, IEEE Computer Society Press, p. 235-236

M. Beccuti, D. Codetta-Raiteri, G. Franceschinis, S. Haddad. Non deterministic Repairable Fault Trees for computing optimal repair strategy. In: Proceedings of the International Conference on Performance Evaluation Methodologies and Tools (VALUETOOLS'08). Atene, Grecia, Oct. 2008

M. Beccuti, G. Franceschinis, M. Kaaniche, K. Kanoun. Multi-level dependability modeling of interdependencies between the Electricity and Information Infrastructures. In: Proc. of the 3rd International Workshop on Critical Information Infrastructure Security. Frascati (RM), Italia, Oct. 2008

M. Beccuti, G. Franceschinis, S. Haddad. Markov Decision Petri Net and Markov Decision Well-Formed Net Formalisms. LECTURE NOTES IN COMPUTER SCIENCE, vol. 4546; p. 43-62, ISSN: 0302-9743

M. Beccuti, D. Codetta-Raiteri, G. Franceschinis, S. Haddad. A framework to design and solve Markov Decision Well-formed Net models. In: Proc. of the 4th International Conference on Quantitative Evaluation of Systems. Edinburgh, UK, September 2007, p. 165-166, IEEE Soc. Press

M. Beccuti, S. Baarir, G. Franceschinis, J-M. Ilié. Efficient lumpability check in partially symmetric systems. In: Proc. of the 3rd International Conference on Quantitative Evaluation of Systems. Riverside, CA, USA, September 2006, p. 211-220, IEEE Soc. Press

D. Codetta-Raiteri, G. Franceschinis, M. Gribaudo. Defining formalisms and models in the Draw-Net Modeling System. In: Proceedings of the International Workshop on Modelling of Objects, Components and Agents (MOCA). Turku, Finland, June 2006, p. 123-144

M. Gribaudo, D. Codetta Raiteri, G. Franceschinis, Draw-Net, a customizable multi-formalism, multisolution tool for the quantitative evaluation of systems, In Proc. 2nd Int. Conf. on Quantitative Evaluation of Systems, QEST'05, 19-22 Sept. 2005,

L. Capra, M. De Pierro, G. Franceschinis, A High Level Language for Structural Relations in Stochastic Well-formed Nets, In Proc. 26th Int. Conf. on Application and Theory of Petri Nets(ATPN 2005), 20-25 June 2005, Miami, Florida, USA. LNCS, Springer Verlag

A. Bobbio, D. Codetta Raiteri, M. De Pierro, G. Franceschinis System Level Dependability Analysis, In System-level Test and Validation of Hardware/Software Systems, Springer Series in Advanced Microelectronics vol. 17, Z. Peng, M. Sonza Reorda, M. Violante editors, Springer, January 2005

L. Capra, M. De Pierro and G. Franceschinis An application example of symbolic calculus for SWN structural relations, In Proc. of 7th Workshop on Discrete Event Systems, September 22-24, 2004, Reims, France.

D. Codetta Raiteri, G. Franceschinis, M. Iacono and V. Vittorini Repairable Fault Tree for the automatic evaluation of repair policies, In Proc. of the International Conference on Dependable Systems and Networks (Performance and Dependability Symposium) DSN2004. June 28-July 1, 2004. Firenze, Italy

M. Gribaudo, F. La Mura, A. Livio Beccaria, G. Franceschinis, and F. Della Corte, MD, A Virtual Reality Framework for Collaborative Exercises in Emergency Medicine, in Proc. of Int. Conf. on Technology Enhanced Learning 2004 (TEL'04), 18-19 Nov. 2004, Milano, Italy

P. Ballarini, L. Capra and G. Franceschinis Performance and Dependability Analysis of Fault-Tolerant Memory Mechanisms Using Stochastic Well-Formed Nets, In Proc. 19th International Symposium on Computer and Information Sciences (ISCIS'04) 27-29 oct. 2004, Kemer, Antalya, Turkey, LNCS 3280, Springer Verlag.

F. Lazzarato, G. Franceschinis, M. Botta and R. Calogero, RRE, a tool for retrieval of annotated non-coding regions from sequenced eukariotic genomes, Bioinformatics, Nov 2004 ;20(16):2848-50. Oxford University Press

V.Vittorini,M. Iacono, N. Mazzocca, and G. Franceschinis, The Osmosys approach to multi-formalism modeling of systems, Journal of Software and System Modeling, Vol.3, No. 1, March 2004, Springer Verlag

E. Teruel, G. Franceschinis, and M. De Pierro, Well-Defined Generalized Stochastic Petri Nets: A Net-Level Method to Specify Priorities, IEEE Transactions on Software Engineering, 29(11), November 2003, pages 962-973

A. Bobbio, E. Ciancamerla, G. Franceschinis, R. Gaeta, M. Minichino and L. Portinale, Sequential application of heterogeneous models for the safety analysis of a control system: a case study, Reliability Engineering & System Safety, Volume 81, Issue 3, Pages 235-341 (September 2003) Elsevier Ltd.

A. Bobbio, G. Franceschinis, R. Gaeta, and L. Portinale, Parametric Fault-Tree for the Dependability Analysis of Redundant Systems and its High Level Petri Net Semantics, IEEE Transactions on Software Engineering, 9(3),March 2003, pages 270-287.

L. Golubchik, J.C.S. Lui, T.F. Tung, A.L.H. Chou, W.-J. Lee, G. Franceschinis and C. Anglano, Multipath continuous media streaming: what are the benefits? Performance Evaluation, 49(1-4), 429-450,September 2002, Elsevier.

L. Capra, C. Dutheillet, G. Franceschinis and J.M. Ilié. Exploiting Partial Symmetries for Markov Chain Aggregation, In Proceedings of First workshop on Models for Time-Critical Systems (MTCS 2000), Satellite workshop of CONCUR2000, Electronic Notes in Theoretical Computer Science, Volume 39, Issue 3

P.Ballarini, S.Donatelli and G.Franceschinis, Parametric Stochastic Well-Formed Nets and Compositional Modelling, In Proc. 21st International Conference on Application and Theory of Petri Nets, Aarhus, Denmark, June 26-30, 2000

L. Capra, C. Dutheillet, G. Franceschinis and J.M. Ilié. Towards Performance Analysis with Partially Symmetrical SWN, In Proc. 7th International Symposium on Modeling, Analysis and Simulation, College Park, MD, USA, October 1999

G.Franceschinis, A.Fumagalli and A.Silinguelli. Stochastic Colored Petri Net Models for Rainbow Optical Networks, Special issue of Advances of Petri Nets on Communication Network Applications, Lecture Notes in Computer Science, Springer Verlag, LNCS 1605, April 1999.

G. Franceschinis, M. Ribaudo Efficient Performance Analysis Techniques for Stochastic Well-Formed Nets and Stochastic Process Algebras, Lectures on Petri Nets II: Applications, Springer Verlag, LNCS 1492, 1998

G.Chiola, C.Dutheillet, G.Franceschinis, and S.Haddad. A Symbolic Reachability Graph for Coloured Petri Nets. Theoretical Computer Science B (Logic, semantics and theory of programming), 176 (1&2):39-65, April 1997, Elsevier.

M.AjmoneMarsan, G.Balbo, G.Conte, S.Donatelli, and G.Franceschinis. Modelling with Generalized Stochastic Petri Nets. J. Wiley, 1995.