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Personal Data

- Date of birth: February 18, 1963

- Place of birth: Bari, Italy

- Gender: Male

- Civil status: married

- Nationality: Italian, Belgian

Education

- Doctoral degree in Applied Sciences, Catholic University of Leuven, Leuven, Belgium, 2000 (Highest distinction).

- Pre-doctoral degree in Applied Sciences, Catholic University of Leuven, Leuven, Belgium, 1997 (Admitted to the doctoral programme).

- Laurea degree (M.Sc.) in Computer Sciences (Scienze dell'Informazione, 4-year programme), Università degli Studi di Bari, Bari, Italy, 1987 (Highest distinction).

- Maturità scientifica degree (Scientific Lyceum, 5-year high school), Liceo Scientifico "Scacchi", Bari, 1982 (Highest distinction).

Current Position

- Post-doctoral researcher at the University of Antwerp since September 2004.

- Course holder (with Chris Blondia) of the course "Seminars on Computer Networks", 2nd Licence in Computer Science, University of Antwerp.

- Responsible of PATS' task force Adaptive-and-Dependable Systems (more information available at http://win.ua.ac.be/~vincenz/ads.html.)

- Co-promotor of one Ph.D. student and 1 M.Sc. student.

- Co-proposer, local team leader, steering committee member for iMinds/IWT project Little Sister.

Past Positions

Employer	Employer's address	Start date	End date	Function	Type
DPT '80	C.so Sicilia 134, I-70100 Bari	01/10/87	30/06/88	Consultant	Full time
Tecnopolis CSATA Novus Ortus	Str.prov.per Casamassima km.3 I-70010 Valenzano	01/06/89	31/03/90	Assistant researcher	Full time
Tecnopolis CSATA Novus Ortus	Str.prov.per Casamassima km.3 I-70010 Valenzano	01/07/90	31/08/96	Researcher	Full time
Tecnopolis CSATA Novus Ortus	Str.prov.per Casamassima km.3 I-70010 Valenzano	01/09/96	31/08/99	Researcher	Leave of absence
K.U.Leuven	Krakenstraat 3 B-3000 Leuven	01/09/96	31/10/00	Assistant researcher	Full time
K.U.Leuven	Krakenstraat 3 B-3000 Leuven	01/11/00	31/09/02	Doctoral assistant	Full time
K.U.Leuven	Krakenstraat 3 B-3000 Leuven	01/10/02	30/09/04	Doctoral assistant	Part time (95%)
K.U.Leuven	Krakenstraat 3 B-3000 Leuven	01/10/02	31/08/04	Part-time professor	Part time (5%)

A. Research

A.1 Publications

A.1.I Books

- "Application-layer Fault-Tolerance Protocols", De Florio V., IGI Global, Hershey, PA 17033, USA, January 2009. ISBN: 978-1-60566-182-7. 378 pages.

- "Innovations and Approaches for Resilient and Adaptive Systems", De Florio V. (editor), IGI Global, Hershey, PA 17033, USA, September 2012. 343 pages.

- "Technological Innovations in Adaptive and Dependable Systems: Advancing Models and Concepts", De Florio V. (editor), IGI Global, Hershey, PA 17033, USA, March 2012. 425 pages.

A.1.II Papers appeared in refereed international research journals

- "On the Constituent Attributes of Software and Organisational Resilience," De Florio, V. To appear in the Interdisciplinary Science Reviews, vol. 38, no. 2, Maney Publishing, June 2013. Impact factor (2011): 0.275.

- "Transformer: an adaptation framework with contextual adaptation behavior composition support,", Gui, N. and De Florio, V. Software: Practice & Experience. Accepted for publication (2013). Wiley. 30 pages. Impact factor (2011): 0.519.

- "Toward Architecture-based Context-Aware Deployment and Adaptation," Gui, N., De Florio, V., and Blondia, C. Journal of Systems and Software, Volume 84, Issue 2, February 2011. Elsevier. 30 pages. Impact Factor (2011): 0.836.

- "Run-time Compositional Software Platform for Autonomous NXT Robots," Gui, N., De Florio, V., and Blondia, C. Int.l Journal of Adaptive, Resilient and Autonomic Systems, Vol.2, No.2 (April 2011). IGI-Global, Hershey, PA 17033, USA. 14 pages.

- "Design Tool To Express Failure Detection Protocols,", De Florio, V. and Blondia, C., IET Software, Vol. 4, No. 2, April 2010. Institution of Engineering and Technology (IET). 14 pages. Impact Factor (2011): 0.329.

- "Adaptation and dependability and their key role in modern software engineering," De Florio, V. and Blondia, C., Int.l Journal of Adaptive, Resilient and Autonomic Systems, Vol.1, No.2, April 2010. IGI-Global, Hershey, PA 17033, USA. 18 pages.

- "The Missing Ones: Key Ingredients Towards Effective Ambient Assisted Living Systems", Sun, H., De Florio, V., Gui, N., and Blondia, C. Journal of Ambient Intelligence and Smart Environments, Vol.2, No.2 (2010). IOS Press. 13 pages. Impact Factor (2011): 0.630.

- "Optimization of WS BPEL Workflows through Business Process Re-engineering Patterns," Buys, J., De Florio, V. and Blondia, C., Int.l Journal of Adaptive, Resilient and Autonomic Systems, Vol.1, No.3 (July 2010). IGI-Global, Hershey, PA 17033, USA. 17 pages.

- "A survey of linguistic structures for application-level fault-tolerance," De Florio, V. and Blondia, C. ACM Computing Surveys, Vol. 40, No. 2 (April 2008). Association for Computing Machinery. 37 pages. Impact Factor (2011): 4.529.

- "Towards Longer, Better, and More Active Lives - Mutual Assisted Living Community for Older People," Sun, H., De Florio, V., Gui, N. and Blondia, C. Journal of the Institute of Telecommunications Professionals, Vol. 2, No. 4 (2008). The Institute of Telecommunications Professionals. 6 pages. Impact Factor (2010): 0.016.

- "On the Requirements of New Software Development," De Florio, V. and Blondia, C. Int.l Journal of Business Intelligence and Data Mining, Vol. 3, No. 3 (2008). Inderscience. 20 pages.

- "The Algorithm of Pipelined Gossiping", De Florio, V. and Blondia, C. Journal of Systems Architecture, Vol. 52 (2006). Elsevier. 22 pages. Impact Factor (2011): 0.444.

- "Dynamics of a Time-outs Management System", De Florio, V. and Blondia, C. Complex Systems, Vol. 16, No. 3 (2006). Complex Systems Publications, Champaign, IL. 15 pages.

- "Methodology for Refinement and Optimisation of Dynamic Memory Management for Embedded Systems in Multimedia Applications", Leeman M., Atienza D., Deconinck G., De Florio V., Mendas J., Ykman C., Catthoor F., Lauwereins R. Journal of VLSI Signal Processing Systems for Signal, Image, and Video Technology, Vol. 40, No. 3 (July 2005). Kluwer Academic Publishers. Impact Factor (2007): 0.623.

- "Permutation Numbers", De Florio V. Complex Systems, Vol. 15, No. 2 (2005). Complex Systems Publications, Champaign, IL. 24 pages.

- "The EFTOS approach to dependability in embedded supercomputing," Deconinck G., De Florio V., Varvarigou Th., Verentziotis E. IEEE Trans. Reliability, Vol.51, No.1 (March, 2002). IEEE. 15 pages. Impact Factor (2011): 1.285.

- "Software-implemented fault-tolerance and separate recovery strategies enhance maintainability," Deconinck G., De Florio V., Botti O. IEEE Trans. Reliability, Vol.51, No.2 (2002). IEEE. 8 pages. Impact Factor (2011): 1.285.

- "A Formal Model and an Algorithm for Generating the Permutations of a Multiset," De Florio V., Deconinck G., WSEAS Transactions on Systems, Vol. 1 (Jan. 2002). World Scientific and Engineering Academy and Society (WSEAS). 6 pages.

- "Le logiciel d'intermédiation: Un panorama critique et réutilisation dans les systèmes d'automatisation enfouis à sûreté de fonctionnement," Tirtea R., Deconinck G., De Florio V. Génie logiciel, No.61 (June, 2002). Paris-La-Défense: Agence de l'informatique. 7 pages.

- "An Application-Level Dependable Technique For Farmer-Worker Parallel Programs", De Florio V., Deconinck G., Lauwereins R. Informatica, Vol. 23, No. 2 (May 1999). Slovene Society Informatika, Ljubljana, Slovenia. 7 pages.

- "Fault Tolerant Communication in Embedded Supercomputing", Efthivoulidis G., Verentziotis E., Meliones A., Varvarigou Th., Kontizas A., Deconinck G., De Florio V. IEEE Micro No. 5 (Sept. 1998). IEEE. 11 pages. Impact Factor (2011): 3.205.

- "Software Tool Combining Fault Masking with User-Defined Recovery Strategies", De Florio V., Deconinck G., Lauwereins R., IEE Proc. Software (now known as IET Software), Vol. 145, No. 6 (December 1998). IEE in association with the British Computing Society. 9 pages. Impact Factor (2011): 0.329.

- "Industrial Embedded HPC Applications", Deconinck G., Varvarigou Th., Botti O., De Florio V., Kontizas A., Truyens M., Rosseel W., Lauwereins R., Cassinari F., Graeber S., Knaak U. Supercomputer, November 1997. ASFRA, Edam, The Netherlands. 22 pages.

- "The HeartQuake Dynamic System", De Florio V., Complex Systems, Vol. 9, No. 2 (April 1995). Complex Systems Publications, Champaign, IL. 24 pages.

A.1.III Papers appeared as chapters in books

- "Building Mutual Assistance Living Community for Elderly People," Sun, H., De Florio V., Gui N., and Blondia C., chapter appeared in "Intelligent Technologies for Bridging the Grey Digital Divide" (Jeffrey Soar et al., Eds.). IGI Global, 2011. 13 pages.

- "Software Assumptions Failure Tolerance: Role, Strategies, and Visions," De Florio, V., in "Architecting Dependable Systems, Vol. 7" (Antonio Casimiro, Rogrio de Lemos, and Cristina Gacek, Eds.), Lecture Notes in Computer Science, Vol. 6420. Springer, 2010. 24 pages.

- "Architecting Distributed Control Applications, based on (Re)Configurable Middleware," Deconinck G., De Florio V., Belmans R., Chapter in R. De Lemos, C. Gacek, R. Romanovsky (Eds.), in "Architecting Dependable Systems, Vol. 2", Lecture Notes in Computer Science Vol. 3069. Springer, Berlin, 2004. 21 pages.

A.1.IV Patents

- "System and Method for Adapting Software Architecture", De Florio, V., and Gui, N., European Patent. Date of publication: 04.05.2011, bulletin 2011/18, application number: EP 09174712.1, date of filing: 30.10.2009. US Patent Application 20120284009, application number: 13/505019, publication date: 8.11.2012, date of filing: 26.10.2010.

A.1.V Articles published in the Proc. of referred international Conferences, Workshops, and Symposia

- "Service-oriented Communities, Models and Concepts towards Fractal Social Organizations," De Florio, V., Coronato, A., Bakhouya, M., and Di Marzo Serugendo, G. In Proc. of the 8th Int.l Conference on signal, image technology and internet based systems (SITIS 2012), Sorrento, Italy, 25-29 November 2012. IEEE.

- "Safety Enhancement Through Situation-aware User Interfaces," De Florio, V. and Blondia, C. In Proc. of the 7th Int.l IET System Safety Conference, Edinburgh, UK, 15-18 October 2012. IET.

- "Towards Parsimonious Resource Allocation in Context-Aware n-Version Programming," Buys, J., De Florio, V., and Blondia, C. In Proc. of the 7th Int.l IET System Safety Conference, Edinburgh, UK, 15-18 October 2012. IET.

- "Formal Modeling of Socio-technical Collective Adaptive Systems," Coronato, A., De Florio, V., Bakhouya, M., and Di Marzo Serugendo, G. In Proc. of the First Int.l Workshop on Adaptive Service Ecosystems, Nature and Socially Inspired Solutions (ASENSIS 2012), Lyon, France, 10 September 2012. IEEE.

- "Towards Meta-Adaptation support with Reusable and Composable Adaptation Components," Gui, N. and De Florio, V. In Proc. of the Sixth IEEE Int.l Conference on Self-Adaptive and Self-Organizing Systems (SASO 2012), Lyon, France, 10-14 September 2012. IEEE.

- "WSDM-based Autonomic Augmentation of Classic Multiple-Version Software Fault-Tolerance Mechanisms," Dillen, R., Buys, J., De Florio, V. and Blondia, C. In Proc. of the Safecomp 2012 Workshop "DEpendable and SEcure Computing for Large-scale Complex Critical Infrastructures" (DESEC4LCCI '12), Magdeburg, Germany, 25 Sept. 2012. Springer.

- "On the Role of Perception and Apperception in Ubiquitous and Pervasive Environments," De Florio, V. In Proc. of the 3rd Workshop on Service Discovery and Composition in Ubiquitous and Pervasive Environments (SUPE'2012), Niagara Falls, Ontario, Canada, August 27-29, 2012. Elsevier.

- "Robust and Tuneable Family of Gossiping Algorithms," De Florio, V. and Blondia, C. In Proc. of the 20th Euromicro Int.l Conference on Parallel, Distributed, and Network-Based Processing (PDP 2012), Garching, Germany, February, 15-17, 2012. IEEE Comp. Soc. Press.

- "Robust-and-evolvable Resilient Software Systems, Open Problems and Lessons Learned," De Florio, V. Proc. of the 8th workshop on Assurances for self-adaptive systems (ASAS 2011). September 4, 2011, Szeged, Hungary. Association for Computing Machinery.

- "Towards Context-Aware Adaptive Fault Tolerance in SOA Applications", Buys, J., De Florio, V. and Blondia, C. In Proc. of the 5th ACM Int.l Conference on Distributed Event-Based Systems (DEBS), 2011, New York, USA. Association for Computing Machinery.

- "Trading off Complexity for Expressiveness in Programming Languages for Embedded Devices: Visions and Experiences," De Florio, V. and Blondia, C. In Proc. of the 3rd Int.l Conference on Advanced Communication and Networking (ACN 2011), August 15-17, 2011, Brno University, Czech Republic. Lecture Notes in Computer Science. Springer.

- "System Structure for Dependable Software Systems", De Florio, V. and Blondia, C. In Proc. of the 11th Int.l Conference on Computational Science and Its Applications (ICCSA 2011), Lecture Notes in Computer Science, Volume 6784/2011, pp. 594-607, June 20-23, 2011, Santander, Spain. Springer.

- "Service-oriented Communities: Visions and Contributions towards Social Organizations", De Florio, V. and Blondia, C. In Proc. of the Fifth Int.l Workshop on MObile and NEtworking Technologies for social applications (MONET 2010), Lecture Notes in Computer Science, Volume 6428/2010, pp. 319-328, October 25-29, 2010, Crete, Greece. Springer.

- "Run-time Reconfiguration Software Platform for Autonomous Robots," Gui, N., Pintens, P.J., De Florio, V., and Blondia, C. In Proc. of the 4th Int.l workshop on Adaptive and DependAble Mobile Ubiquitous Systems (ADAMUS 2010), held in the framework of the 7th ACM Int.l Conference on Pervasive Services (ACM ICPS 2010). July 13-15, 2010, Berlin, Germany. Invited paper. Association for Computing Machinery.

- "ACCADA: A Framework for Continuous Context-Aware Deployment and Adaptation," Gui, N., De Florio, V., Sun, H. and Blondia, C., Proc. of the 11th Int.l Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2009), Lyon, France, November 3-6, 2009. IEEE.

- "An Architecture-based Framework for Managing Adaptive Real-time Applications," Gui, N., De Florio, V. and Blondia, C. In Proc. of the 35th EuroMicro SEAA Conference 2009, Patras, Greece, August 27-29, 2009 (short paper). IEEE.

- "Adaptation Strategies for Performance Failure Avoidance," Sun, H., De Florio, V., Gui, N., and Blondia, C. Proc. of the 3th IEEE Int.l Conference on Secure Software Integration and Reliability Improvement (SSIRI 2009), July 8-10, 2009, Shanghai, China. IEEE.

- "Adaptive Robot Design and Applications in Flexible Manufacturing Environments," Gui, N., De Florio, V., Sun, H. and Blondia, C. In Proc. of the 13th IFAC Symposium on Information Control Problems in Manufacturing (INCOM '09), Moskow, Russia, June 3-5, 2009. IFAC.

- "Promises and Challenges of Ambient Assisted Living Systems", Sun, H., De Florio, V., Gui, N., and Blondia, C. In Proc. of the 6th Int.l Conference on Information Technology: New Generations (ITNG 2009), April 27-29, 2009, Las Vegas, Nevada, USA. IEEE.

- "A framework for adaptive real-time applications: The declarative real-time OSGi component model," Gui, N., De Florio, V., Sun, H. and Blondia, C. In Proc. of the 7th Workshop on Adaptive and Reflective Middleware (ARM'08), Leuven, Belgium, December 1st 2008. Association for Computing Machinery.

- "Towards Longer, Better, and More Active Lives - Building Mutual Assisted Living Community for Elder People," Sun, H., De Florio, V., Gui, N. and Blondia, C. In Proc. of the 47th European FITCE Congress, Logan Hall, Bloomsbury, London, Sept. 21-24, 2008. FITCE.

- "Adaptive Data Integrity through Dynamically Redundant Data Structures," De Florio, V. and Blondia, C. In Proc. of Third Int.l Conference on Availability, Reliability and Security (ARES 2008), Barcelona, Spain, March 4-7, 2008. IEEE.

- "Towards Building Virtual Community for Ambient Assisted Living," Sun, H., De Florio, V., Gui, N. and Blondia, C. In Proc. of 16th Euromicro Int.l Conference on Parallel, Distributed and network-based Processing (PDP 2008). IEEE Computer Society.

- "Applying Business Process Re-engineering Patterns to Optimize WS-BPEL Workflows," Buys, J., De Florio, V. and Blondia, C. , in Proc. of IT Revolutions 2008, Lecture Notes of ICST. Springer.

- "A Hybrid realtime component model for reconfigurable embedded systems," Gui, N., De Florio, V., Sun, H. and Blondia, C. In Proc. of the 23rd Annual ACM Symposium on Applied Computing (SAC 2008). Association for Computing Machinery.

- "Service Matching in Online Community for Mutual Assisted Living," Sun, H., De Florio, V., Gui, N. and Blondia, C. In Proc. of the 3rd Int.l Conference on Signal-Image Technology & Internet based Systems (SITIS' 2007), Shanghai, China, Dec. 16-19, 2007. IEEE Computer Society.

- "Reflective and Refractive Variables: A Model for Effective and Maintainable Adaptive-and-Dependable Software", De Florio, V., Blondia, C. In Proc. of the 33rd Euromicro Conference on Software Engineering and Advanced Applications (SEEA 2007), Lbeck, Germany, August 27-31 2007. IEEE.

- "Adaptive Feedback-loop Control System for Inter-reality Management", De Florio, V., van Vaerenbergh, J. and Blondia, C. In Proc. of the 2007 IEEE Three-Rivers Workshop on Soft Computing in Industrial Applications (SMCia/07), Passau, Germany, August 1-3, 2007. IEEE.

- "Global Adaptation Framework for Quality of Experience of Mobile Services", Sun, H., De Florio, V., Gui, N. and Blondia, C. In Proc. of the 2007 IEEE Three-Rivers Workshop on Soft Computing in Industrial Applications (SMCia/07), Passau, Germany, August 1-3, 2007. IEEE.

- "Adaptation as a New Requirement for Software Engineering", De Florio, V., Blondia, C. In Proc. of the First IEEE WoWMoM Workshop on Adaptive and DependAble Mission- and bUsiness-critical mobile Systems (ADAMUS'07), Helsinki, Finland, June 18, 2007. IEEE.

- "A Service-oriented Infrastructure Approach for Mutual Assistance Communities", Gui, N., Sun, H., De Florio, V., Blondia, C. In Proc. of the First IEEE WoWMoM Workshop on Adaptive and DependAble Mission- and bUsiness-critical mobile Systems (ADAMUS'07), Helsinki, Finland, June 18, 2007. IEEE.

- "Participant: A New Concept for Optimally Assisting the Elder People", Sun, H., De Florio, V., Gui, N. and Blondia, C. In Proc. of the 20th IEEE Int.l Symposium on Computer-Based Medical Systems (CBMS-2007), Maribor, Slovenia, June 20-22, 2007. IEEE.

- "A Tool for the Expression of Failure Detection Protocols", De Florio, V., and Blondia, C. In Proc. of the 15th EUROMICRO Conference on Parallel, Distributed and Network-based Processing (PDP 2007), Naples, Italy, February 7-9, 2007. IEEE.

- "A Design Tool to Reason about Ambient Assisted Living Systems", Sun, H., De Florio, V., Blondia, C. In Proc. of the 6th Int.l Conference on Intelligent Systems Design and Applications (ISDA'06), October 16-18, 2006, Jinan, Shandong, China. IEEE.

- "A System Structure for Adaptive Mobile Applications,", De Florio, V. and Blondia, C. In Proc. of the Sixth IEEE Int.l Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2005), Taormina - Giardini Naxos, Italy, June 13-16, 2005; pp. 270-275. IEEE.

- "Fast Prototyping and Refinement of Complex Dynamic Data Types in Multimedia Applications for Consumer Embedded Devices," Atienza D., Leeman M., Catthoor F., Mendas J., De Florio V., Deconinck G. In Proc. of the 2004 IEEE Int.l Conference on Multimedia and Expo (ICME2004), Taipei, Taiwan, June 27-30, 2004. IEEE.

- "Using resource monitoring to select recovery strategies," Tirtea R., Deconinck G., De Florio V., Belmans R., 2004 Annual Reliability & Maintainability Symposium (RAMS 2004), Los Angeles, California, USA, January 26-29, 2004; pp. 266-271. IEEE.

- "Some experiences on dynamic memory management refinement at system-level for multimedia," Atienza D., Leeman M., Ykman C., Catthoor F., Mendas J., De Florio V., Deconinck G., 18th Conf. on Design of Circuits and Integrated Systems (DCIS-2003), Ciudad Real, Spain, November 18-21, 2003; pp. 275-280. IEEE.

- "Power estimation approach of dynamic data storage on a hardware software boundary level," Leeman M., Atienza D., Catthoor F., De Florio V., Deconinck G., Mendas J., Lauwereins R., in Proc. of the 13th Int. Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS-2003), J.J. Chico, E. Macii (Eds.), Lecture notes in Computer Science Vol. 2799, Torino, Italy, September 10-12, 2003; pp. 289-298. Springer.

- "Methodology for refinement and optimization of dynamic memory management for embedded systems in multimedia applications," Leeman M., Atienza D., Ykman C., Catthoor F., Mendas J., De Florio V., Deconinck G., Lauwereins R. In Proc. of the IEEE Workshop on Signal Processing Systems (SIPS-2003). IEEE Signal Processing Society and IEEE Circuits and Systems Society, Seoul, Korea, August 27-29, 2003; pp. 369-374. IEEE.

- "Integrating recovery strategies into a primary substation automation system," Deconinck G., De Florio V., Belmans R., Dondossola G., Szanto J., Int. Conf. on Dependable Systems and Networks (DSN-2003), Dependable Computing and Communications Symposium, San Francisco, CA, USA, June 22-25, 2003; pp. 80-85. IEEE.

- "Recovery languages as a means to embed error recovery in distributed applications," De Florio V., Deconinck G., Tirtea R., Belmans R. In Proc. of the 8th CaberNet Radicals workshop on distributed and dependable systems, Ajaccio, France, October 5-8, 2003; 5 pages. IEEE.

- "Intermediate variable elimination in a global context for a 3D multimedia application," Leeman M., Atienza D., Deconinck G., De Florio V., Lauwereins R., Catthoor F., Mendas J., In Proc. of the IEEE Int. Conf. on Multimedia & Expo (ICME-2003), Vol II, Baltimore, MD, USA, July 6-9, 2003; pp. 73-76. IEEE

- "Automated dynamic memory data type implementation exploration and optimisation," Leeman M., Ykman C., Atienza D., De Florio V., Deconinck G., In Proc. of the Annual Symp. on VLSI (ISVLSI 2003), Tampa, FL, USA, February 20-21, 2003. IEEE Comp. Soc. Press.

- "A flexible library for dependable master-worker parallel programs," Leeman M., Leeman M., De Florio V., Deconinck G., 11th Euromicro Workshop on Parallel and Distributed Processing (PDP-2003), Genoa, Italy, February 5-7, 2003; pp. 299-307. IEEE.

- "Flexible Development of Dependability Services: An Experience Derived from Energy Automation Systems," De Florio, V., Donatelli, S., and Dondossola, G., In Proc. of the 9th IEEE Conf. and Workshop on Engineering of Computer-Based Systems (ECBS-2002), Lund, Sweden, 8-11 April, 2002. IEEE.

- "QoS monitoring at middleware level for dependable distributed automation systems," Tirtea R., Deconinck G., De Florio V., Belmans R. In Proc. of the 13th Int.l Symposium on Software Reliability Engineering (ISSRE 2002), student award, ISBN 0-9671473-2-8, Annapolis, Maryland, USA, November 12-15, 2002. IEEE.

- "Dependable Distributed Automation Systems within an Open Communication Infrastructure," Deconinck G., De Florio V., Belmans R. In Proc. CRIS Int. Conf. on Power Systems and Communication Systems Infrastructure for the Future 2002, Beijing, P. R. China, Sep. 22-27, 2002; 6 pages. IEEE.

- "Education of embedded systems: Design of a set-top box for streaming audio applications on C6711 and MSP430 devices," Leeman M., Barat F., De Florio V., Deconinck G. In Proc. of the Texas Instruments Developer Conf. (TIDevConf), Houston, TX, USA, August 6-8, 2002; 11 pages. Texas Instruments.

- "A Massively Parallel Architecture for Hopfield-type Neural Network Computers," De Florio V., Deconinck G., Belmans R. In Proc. of the 4th Euromicro Int. Conf. on Massively Parallel Computing Systems (MPCS-2002), Ischia,Italy, April 9-12, 2002; 9 pages. IEEE.

- "Bridging the educational gap in embedded systems curricula: Developing an e-commerce audio streaming system," Leeman M., Barat F., De Florio V., Deconinck G. In Proc. of the 9th IEEE Conf. and Workshop on Engineering of Computer-Based Systems (ECBS-2002), Lund, Sweden, 8-11 April, 2002; pp. 211-220. IEEE.

- "ReL: A Fault-Tolerance Linguistic Structure for Distributed Applications," De Florio V., Deconinck G. In Proc. of the 9th IEEE Conf. and Workshop on Engineering of Computer-Based Systems (ECBS-2002), Lund, Sweden, 8-11 April, 2002; pp. 51-58. IEEE.

- "On Some Key Requirements of Mobile Application Software,", De Florio V., Deconinck G. In Proc. of the 9th IEEE Conf. and Workshop on Engineering of Computer-Based Systems (ECBS-2002), Lund, Sweden, 8-11 April, 2002; pp. 3-8. IEEE.

- "Controlling a community of distributed generators,", Vanthournout K., Deconinck G., De Florio V. In Proc. of the IEEE Young researchers Symposium in Electrical Power Engineering - Distributed Generation, Leuven, Belgium, February 7-8, 2002; 5 pages. IEEE.

- "A Parallel processing model based on generative communication and recovery languages," De Florio V., Deconinck G. In Proc. of the 14th Int. Conf. on Software & Systems Engineering and their Applications (ICCSEA 2001), Paris, France, December 4-6, 2001. Springer.

- "Distributed embedded automation systems: dynamic environments and dependability," Deconinck G., De Florio V., Dondossola G., Kufner H., Mazzini G., Calella S., Donatelli S., in Supplement Proceedings of the Int. Conf. on Dependable Systems and Networks (DSN-2001), Gtenborg, Sweden, July 1-4, 2001. IEEE.

- "The Recovery Language Approach for Software-Implemented Fault Tolerance," De Florio V., Deconinck G., Lauwereins R., in Proc. 9th Euromicro Workshop on Parallel and Distributed Processing (PDP2001), Mantova, Italy, February 7-9, 2001; pp. 418-425. IEEE.

- "Separating Recovery Strategies from Application Functionality: Experiences with a Framework Approach", Deconinck G., De Florio V., Botti O., in Proc. 2001 Ann. Reliability & Maintainability Symp. (RAMS2001), Philadelphia, PA, USA, January 22-25, 2001; pp. 246-251. IEEE reliability Society.

- "A formal Model and an Algorithm for Generating the Permutations of a Multiset," De Florio V., Deconinck G., in Proc. of the 2001 WSES Int.l Conference on Computer mathematics, Queensland, Australia, December 17-21, 2001. WSES.

- "Design and Implementation of a Data Stabilizing Software Tool,", De Florio V., Deconinck G., Lauwereins R., Graeber S., Proc. 9th Euromicro Workshop on Parallel and Distributed Processing (PDP-2001), IEEE Comp. Soc., Los Alamitos, CA, USA, Mantova, Italy, February 7-9, 2001. IEEE.

- "A Novel Distributed Algorithm for High-Throughput and Scalable Gossiping,", De Florio V., Deconinck G., Lauwereins R. In Proc. of the 8th Int.l Conference on High Performance Computing and Networking Europe (HPCN Europe 2000), Amsterdam, The Netherlands, May 10, 2000; pp. 313-322. LNCS. Springer.

- "An algorithm for tolerating crash failures in distributed systems,", De Florio V., Deconinck G., Lauwereins R. In Proc. of the 7th Annual IEEE Int.l Conference and Workshop on the Engineering of Computer Based Systems (ECBS 2000), Edinburgh, Scotland, April 3, 2000; pp. 9-17. IEEE.

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- "TIRAN: flexible and portable fault tolerance solutions for cost effective dependable applications," Botti O., De Florio V., Deconinck G., Cassinari F., Donatelli S., Bobbio, A., Klein A., Kufner H., Thurner E., Lauwereins R., Verhulst E. In Proc. 5th Int. Euro-Par Conference on Parallel Processing (EuroPar'99), Lecture Notes in Computer Science (Eds. P. Amestoy, P. Berger, M. Daydé, I. Duff, V. Frayss, L. Giraud, D. Ruiz), August, 1999; pp. 1166-1170. Springer.

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- "The EFTOS Voting Farm: a Software Tool for Fault Masking in Message Passing Parallel Environments," De Florio V., Deconinck G., Lauwereins R. In Proc. of the 24th EUROMICRO Conf. on Engineering Systems and Software for the next decade, Vasteras, Sweden, August 25-27, 1998; pp. 379-386. IEEE.

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A.1.VI Other articles

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- "Recovery Languages: an Effective Structure for Software Fault Tolerance," De Florio V., Deconinck G., Lauwereins R., in Fast abstract Proc. of the 9th Int. Symp. on Software Reliability Engineering (R. Chillarege and T. Illgen, Eds.), Paderborn, Germany, November 4, 1998; pp. 39-40. IEEE.

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- "Il fenomeno Java," De Florio V., Login, No. 1, Nov. 1996 (in Italian). Infomedia.

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- "Prime applicazioni CCI in linguaggio C," De Florio V., DEV Developing Software Solutions No. 30, May 1996 (in Italian). Infomedia.

- "CGI-Lib, una libreria dinamica object-oriented di servizi CGI," De Florio V., DEV Developing Software Solutions No. 31, June 1996 (in Italian). Infomedia.

- "L'azienda virtuale Mudhoney," De Florio V., Ferrandes S., Pileggi M., Romito E., Schiavone E., Semeraro V., Sgobba A., Internet News, Vol. 1, No. 7, Oct. 1995 (in Italian). Tecniche Nuove.

- "Enciclopedia globale sfogliando il computer-l'ipertesto a Tecnopolis," De Florio V., La Gazzetta del Mezzogiorno, 26 Oct. 1994 (nationwide Italian newspaper).

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- "RHL and PvmLinda, two programming environments for parallel systems,", De Florio V., Murgolo, F.P., Spinelli, V., and Musajo Soma, G. In Proc. of the Italian Convex Users Group (Convex Computer Corp., USA), Taormina, Italy, Sept. 1993. Convex Computer Corp.

A.1.VII Technical reports

- "A novel distributed algorithm for high-throughput and scalable gossiping," De Florio, V., Technical Report ESAT/ACCA/2000/1, Katholieke Universiteit Leuven, Feb. 2000.

- "The DIR Net: A Distributed System for Detection, Isolation, and Recovery," De Florio, V., Technical Report ESAT/ACCA/1998/1, Katholieke Universiteit Leuven, Oct. 1998. 57 pages.

- "The Voting Farm - A Distributed Class for Software Voting," De Florio, V., Technical Report ESAT/ACCA/ 1997/3, Katholieke Universiteit Leuven, June 1997, 57 pages.

- "The EFTOS Recovery Language," De Florio, V., Technical Report ESAT/ACCA/1997/4, Katholieke Universiteit Leuven, Dec. 1997, 32 pages.

- "Analisi lessicale e sintattica con Lex e YACC", De Florio, V., Tech. Rep. Università degli Studi di Bari, May 1996.

- "La Rete di Public Domain Software Server Scientifici Distribuiti", De Florio, V., Murgolo, F., Tech. Rep. Progetto Finalizzato C.N.R. (Italian Research Council) "Sistemi Informatici e Calcolo Parallelo" (SICP) n.1/211, March 1995.

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- "Un algoritmo parallelo basato sulla corrispondenza tra segmenti omologhi per la ricostruzione tridimensionale di oggetti in una scena", Murgolo, F., De Florio, V. et al., Tech. Rep. P.F. "SICP" C.N.R., n.1/97, Oct. 1992.

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- "A guide to public domain software for high performance computing users", Murgolo, F., De Florio, V., Tech. Rep. P.F. "SICP" C.N.R., n.8/25, Oct. 1991.

- "Analisi ed implementazione parallela di operatori per l'elaborazione di basso livello di immagini", Murgolo, F., Bitetto, V., De Florio, V., Tech. Rep. P.F. "SICP" C.N.R., n.1/73, August 1991.

- "Analisi e disegno di un kernel di operatori per l'elaborazione di basso livello in ambiente parallelo", Murgolo, F., Bitetto, V. Ancona, A., De Florio, V., Tech. Rep. P.F. "SICP" C.N.R., n.1/60, May 1991.

- "Introduzione alla scrittura di un codice parallelo", De Florio, V., Tech. Rep. Tecnopolis CSATA Novus Ortus, March 1991.

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- "Progettazione del nodo di elaborazione e trasmissione in Tecnopolis: fase conoscitiva", Murgolo, F., De Florio, V., Tech. Rep. Tecnopolis CSATA Novus Ortus, Dec. 1990.

A.1.VIII Dissertations

- "A Fault-Tolerance Linguistic Structure for Distributed Applications", De Florio V., Ph.D. Thesis, Dept. of Electrical Engineering, Katholieke Universiteit Leuven, Oct. 2000. ISBN 90-5682-266-7. 212 pages.

- "Analisi e simulazione di eventi discreti - applicazioni per la performance analysis dei sistemi di elaborazione", De Florio V., (Discrete Events Analysis and Simulation - application to the performance analysis of computing systems), Laurea thesis, Istituto di Scienze dell'Informazione, Università di Bari, Oct. 1987. Approx. 250 pages. (In Italian).

A.1.IX Other Articles in or Parts of Books Dissertations

- "SOFTMAT Description", Murgolo F., Bitetto V., De Florio V. In Products Book of the C.N.R. Project "Sistemi Informatici e Calcolo Parallelo", Fadini, May 1994.

- "PARVE: Parallel Robotic Vision Environment", Murgolo, F., Bitetto, V., De Florio, V. In Catalogo dei prodotti del convegno nazionale del II biennio di attivit del Progetto Finalizzato S.I.C.P. del C.N.R.. Napoli, 9-11 June 1993, and in Products Book of the C.N.R. Project "Sistemi Informatici e Calcolo Parallelo", Fadini, May 1994.

A.1.X Presentations without a paper

- "SSET seminar: Cost-effective software reliability through autonomic tuning of system resources", De Florio, V., IMEC-Academy, May 4, 2011. IMEC. (1h). Available online.

- "Cost-Effective Software Reliability Through Autonomic Tuning of System Resources," De Florio, V., the 2010 Int.l Applied Reliability Symposium, Europe, Berlin, Germany, April 7-9, 2010 (50').

- "On the Design of Adaptive-and-Dependable Systems in Antwerp," De Florio, V., WADS 2009, the DSN 2009 Workshop on Architecting Dependable Systems, Estoril, Portugal, 29 June 2009 (invited talk, 35').

- "Teaching resilient computing in Antwerp: report, considerations, and vision," De Florio, V., EWICS-ReSIST Joint Workshop on Teaching Resilient Computing, Erlangen, Germany, 2007 (20').

A.1.XI Prefaces to books or journal issues

- "Preface," De Florio, V., International Journal of Adaptive, Resilient and Autonomic Systems (IJARAS), Volume 1, No. 1, January 2010. IGI Global, Hershey, PA 17033, USA. ISSN: 1947-9220, EISSN: 1947-9239.

- "Preface," De Florio, V., Technological Innovations in Adaptive and Dependable Systems, Advancing Models and Concepts". IGI Global, Hershey, PA 17033, USA. DOI: 10.4018/978-1-4666-0255-7, ISBN13: 9781466602557. March 2012.

- "Preface," De Florio, V., Innovations and Approaches for Resilient and Adaptive Systems", Advances Book Series "Advances in Adaptive, Resilient and Autonomic Systems" (AARAS) DOI: 10.4018/978-1-4666-2056-8, ISBN13: 9781466620568. September 2012. IGI Global, Hershey, PA 17033, USA.

- "Introductory message," Cotroneo, D., De Florio, V., the 5th International workshop on adaptive and dependable mobile ubiquitous systems (ADAMUS2011), 2011 IEEE/IFIP 41st International Conference on Dependable Systems and Networks Workshops (DSN-W), pp. 278-279. IEEE.

- "Existing challenges and new opportunities in context-aware systems", Waltenegus, Dargie, Plosila, Juha, and De Florio, Vincenzo. Introductory message in the Proceedings of the 2012 ACM Conference on Ubiquitous Computing (UbiComp '12), pp. 749-751. Pittsburgh, Pennsylvania, 2012. ACM.

A.2 Activity Pertaining to Research Contracts

- 2013–2014: iMinds Project Little Sister.

  Project type: iMinds ICON Project.

  Role: CO-PROPOSER and local team leader.

  Partners: VITO, CM, NIKO, SERIS, JF Oceans, UGent/IPI, UGent/MICT, UA/PATS, VUB/ETRO, UGent/MMLAB.

  Obtained fundings: 16MM (112399 Euros).

  Duration: January 2013–December 2014.

- 2009–2011: IBBT Project ModelSoft (Model-driven software design and optimization, IBBT-ISBO)

  Project type: IBBT ISBO.

  Role: local team leader.

  Partners: UGent/INTEC, UA/PATS.

- 2005–2008: ARFLEX Project (Adaptive Robots for Flexible Manufacturing Systems)

  Project type: STREP, IST & NMP research area IST-NMP-1: Integrating Technologies for the Fast and Flexible Manufacturing Enterprise)

  Role: CO-PROPOSER and local team leader.

  Partners: UA/PATS, EICAS Automazione S.p.A., ACCENT, COMAU, Jozef Stefan Institute, Fraunhofer IPK-FHG, ZHW Institute of Mechatronic Systems.

  Obtained fundings: 36MM (231500 euros).

  Duration: September 2005–August 2008.

- 2005–2008: IBBT Project QoE (End-to-end Quality of Experience, IBBT-ISBO)

  Project Type: IBBT ISBO.

  Role: local team leader.

> Partners: UA/PATS, K.U.Leuven/COSIC, IMEC/NES, K.U.Leuven/DistriNet, UGent/IBCN, UGent/MICT, UGent/MMLAB, UGent/WiCa, UHasselt/EDM, VUB/ETRO, VUB/SMIT
>
> Fundings: 78MM.
>
> Duration: January 2005–September 2008.

- 2000–2002: DepAuDE Project (IST-2000-25434, Dependability for embedded automation systems in dynamic environments with intra-site and inter-site dependability aspects).

  > Project Type: FP6 IST.
  >
  > Role: System designer, responsible for the design of the software architecture.
  >
  > Partners: K.U.Leuven, CESI SpA, Siemens AG, Universit di Ferrara, Universit di Torino, TXT e-solutions.
  >
  > Fundings: 56MM (386384 euros).

- 1998–2000: TIRAN Project (ESPRIT 28620, Tailorable fault tolerance framework for embedded applications).

  > Project Type: ESPRIT.
  >
  > Role: System designer and developer, responsible for the design of the key architectural software components of the project.
  >
  > Partners: Siemens, TXT Ingegneria, ENEL, Eonic Systems, Universit di Torino, K.U.Leuven.
  >
  > Fundings: 24 MM (177100 euros).

- 1996–1998: EFTOS Project (ESPRIT 21012, Embedded Fault Tolerant Supercomputing).

  > Project Type: ESPRIT.
  >
  > Role: System designer and developer; responsible for the design of the key architectural software components of the project.
  >
  > Partners: Parsytec, AEG/Siemens, Deutsche Luft und Raumfahrt, TXT Ingegneria, ENEL, NTUA, K.U.Leuven.
  >
  > Fundings: 55 MM (473392 euros).

- 1991–1994: "Sistemi Informatici e Calcolo Parallelo" (SICP).

  > Project Type: "Progetto finalizzato" of the Italian National Research Council.
  >
  > Role: System designer and developer.
  >
  > Partners: a pool of about 40 Italian Universities, research centers, and enterprises.

A.3 Promotor for Doctoral Students

- From February 2006 to October 2011: Promotor of Hong Sun, doctoral programme in computer science of the University of Antwerp. A brief description of Hong Sun's research follows:

  > "Service Oriented Architecture (SOA) is becoming more and more popular in system development, which is due to its flexibility to integrate and organize available functionalities. A domain where such flexibility is crucial is Ambient Assisted Living (AAL), which aims to help the elderly people independently living in their homes. As well known, the proportion of elderly people keeps increasing since the end of last century, which poses great challenges to our society and calls for solutions both efficacious and cost-effective. The concept of using SOA to construct a so-called mutual assistance community to help the elderly people independently living is carried during the PhD study. SOA and AOP (aspect oriented programming) technologies are studied to organize assistive devices around the elderly people in an adaptive way, so that changes would be monitored and adaptations could be carried out in agile way. Human-services could be integrated in the service oriented computation, to produce effective services for the elderly people."

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This research won Hong Sun the "FITCE.be Young ICT Personality 2008" competition, number one winner with the work "Towards Longer, Better, and More Active Lives—Building Mutual Assisted Living Community for Elder People", and "IBM Service Innovation Student Contest 2007", number one winner with the work "The 21st Century, the best century ever", as well as an IBM Ph.D. Fellowship (2009). PhD defense defended in 2012. A copy of Dr. Sun's thesis may be found here: http://win.ua.ac.be/~vincenz/theses.

- From May 2006 to September 2012: Promotor of Ning Gui, doctoral programme in computer science of the University of Antwerp. Ning Gui defended his doctoral thesis "Middleware-based adaptation evolution with reusable adaptation components" on September 17, 2012. A brief description of Ning Gui's research follows:

  "With recent development of mobile and pervasive computing, software applications are increasingly expected to dynamically adjust their behaviours according to the highly dynamic environments they are deployed in Applications must sense the environment changes and reacting upon those changes based on their contextual knowledge. For each new context, a new adaptation logic is required. This results in the high complexity of adaptive software development, especially for changing environments. Multiple approaches have been proposed to facilitate the development of adaptive systems. However, such works mostly focused on providing support for particular set of systems and with pre-defined quality-of-service optimization goals. Therefore, they are costly to reuse in new systems and hard to adjust to other concerns. How to streamline the engineering of adaptation with multiple and evolving combinations of concerns remains a largely unexplored topic. This work addresses this issue from two aspects: Firstly, a novel adaptive framework is proposed by extending the separation of concerns paradigm to adaptation logics design. System's global adaptation behaviour is contextually constructed with multiple reusable adaptation modules each of which embeds an adaptation strategy limited to one or more concerns. Rather than assuming these strategies to be orthogonal and thus not interfering with each other, this framework provides a systematic and customizable conflict detection policy and resolution mechanism. Secondly, a modular middleware architecture is designed to facilitate the incremental deployment of new and unforeseen adaptation modules. Software engineers are provided with the ability to add/remove/update adaptation modules during run-time. Development of adaptation modules is simplified by factoring out common adaptation mechanisms. Our approach, embodied in a adaptation framework called Transformer, provides an engineering approach to monitor a target system and its environment, detect opportunities for improvements, select a course of adaptation strategies, resolve possible conflicts and apply changes to a software architecture. Our work was compared to the state of the art from both theoretical and practical viewpoints. Design evaluation and experiment results show that our system has significant advantage over traditional approaches in light of flexibility and reusability of the adaptation modules, with little complexity and performance overhead. Moreover, our framework was applied in a practical case study — autonomous robots control. Experience gained from this case justified that both the framework design and modular middleware-based implementation add significant value to developers in designing and incorporating new adaptation logics."

  A copy of Dr. Gui's thesis may be found here: http://win.ua.ac.be/~vincenz/theses.

- From September 2007: Promotor of Jonas Buys, Ph.D. programme in computer science of the University of Antwerp. A short description of Jonas Buys' Ph.D. follows:

  "The objective of this doctorate is to add intelligence for system autonomy to Service Oriented Architectures (SOAs), resulting in adaptive and dependable business processes that can be dynamically optimized and corrected by the system to reduce the execution time and increase the availability. A first goal is achieving self-optimizing, self-healing hybrid SOAs in which human actors operate next to conventional IT systems exposed as web services. A second goal is to overcome what we consider the biggest limitation of BPEL processes: BPEL process definitions are static. This sharply contrasts with real-world practice in which processes continuously evolve to improve operational efficiency. It is our intent to extend a BPEL orchestration engine with the capacity to dynamically modify business processes and to optimize the process model. For this purpose we shall implement economic process re-engineering guidelines by exploiting existing computer science techniques. The effect of those guidelines on the process performance will be extensively studied."

Expected date of PhD defense: 2013.

A.4 Awards

Promotor of the doctoral research of Dr. Hong Sun, which was awarded

- the "IBM Service Innovation Student Contest 2007", number one winner with the work "The 21st Century, the best century ever";

- the "FITCE.be Young ICT Personality 2008" competition, number one winner with the work "Towards Longer, Better, and More Active Lives-Building Mutual Assisted Living Community for Elder People";

- an IBM Ph.D. Fellowship (2009) (the only fellowship awarded to a Belgian doctoral student in 2009).

A.5 Doctoral thesis supervision and review

A.5.I Daily supervision

- Hong Sun. See Section A.3.

- Ning Gui. See Section A.3.

- Jonas Buys. See Section A.3.

- Marc Leeman (06/01/2004). Interactive Strategies and Analysis Method for Dynamic Data Type Transformation and Refinement in Multimedia Applications.

- Adrian Dusa (Promotion 2005). The influence of shared networks on the dependability of distributed embedded systems. Subject: Dependability of distributed systems.

A.5.II Jury member

- Tim Verbelen, doctor in computer science enginering, University of Ghent, Belgium. Thesis: Adaptive Offloading and Configuration of Resource Intensive Mobile Applications. Promotors: Bart Dhoedt, Filip De Turck, University of Ghent. Member of the reading committee. Expected date of defense: July 4, 2013.

- Ning Gui, doctor in computer sciences, University of Antwerp. Thesis: "Middleware-based adaptation evolution with reusable adaptation components," defended on January 28, 2011. Promotor.

- Gregory Van Seghbroeck, doctor in computer science enginering, University of Ghent, Belgium. Thesis: Design-time Validation and Execution of Service Choreographies. Promotors: Bart Dhoedt, Filip De Turck, University of Ghent. Member of the reading committee. Expected date of defense: June 2011.

- Satya Munaga, doctor in applied sciences, Catholic University of Leuven, Belgium. Subject: Mitigation of parametric reliability and proactive control aspects of that mitigation. Promotor: Francky Catthoor, IMEC. Member of the reading committee.

- Nico Goeminne, doctor in computer science enginering, University of Ghent, Belgium. Thesis: "Generic Framework for Extending the OSGi Service Platform". Date of defense: 23 June 2009. Promotor: Prof. Dr. Filip De Turck and Frank Gielen. Member of the reading committee.

- Peter De Cleyn, doctor in computer sciences, University of Antwerp. Thesis: "Optimising Mobile IP handovers in IEEE 802.11 networks using cross-layer techniques." Date of defense: 30 September 2008. Promotor: Prof. Dr. Chris Blondia. Member of the reading committee.

- Zhe Ma, doctor in applied sciences, Catholic University of Leuven, Belgium. Subject: Interleaved task scheduling for scalable design- and run-time scheduling on heterogeneous multi-processor SoC's. Date of defense: 24 January 2006. Promotors: Francky Catthoor, Henk Corporaal.

- Marc Leeman, doctor in applied sciences, Catholic University of Leuven, Belgium. Subject: Dynamic data type transformation and refinement. Date of promotion: January 2004. Promotors: Rudy Lauwereins, Gert Deconinck.

- Chun Wong, doctor in applied sciences, Catholic University of Leuven, Belgium. Subject: Compile time scheduling of real-time tasks. Date of promotion: September 2003. Promotors: Rudy Lauwereins, Francky Catthoor.

A.6 Organisation of Conferences, Symposia and Workshops

A.6.I Organization

- Co-chair and co-organizer of the ADAMUS'11 Workshop (the 5th International workshop on Adaptive and DependAble Mobile Ubiquitous Systems), held in the framework of DSN 2011, the 41st Annual IEEE/IFIP International Conference on Dependable Systems and Networks, 27–30 June, 2011, Hong Kong, China.

- Program Vice-Chair (Dependable, Reliable and Autonomic Computing) of the 13th IEEE International Conference on Computational Science and Engineering (CSE-2010), Hong Kong, China, December 11–13, 2010.

- Co-organizer of the ADAMUS'10 Workshop (the 4th International workshop on Adaptive and DependAble Mobile Ubiquitous Systems), in the framework of ACM ICPS 2010 (the 7th ACM International Conference on Pervasive Services), Berlin, 13–16 July, 2010.

- Co-chair and co-organizer of the ADAMUS'09 Workshop (the 3rd International workshop on Adaptive and DependAble Mobile Ubiquitous Systems), London, England July 13–17, 2009.

- Co-organizer and co-chair of the ADAMUS'08 Workshop (2nd International workshop on Adaptive and DependAble Mobile Ubiquitous Systems), Newport Beach, CA, USA, 23-27 June, 2008 in the framework of the 9th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2008).

- Co-organizer and co-chair of the ADAMUS'07 Workshop (International workshop on Adaptive and DependAble Mission- and bUsiness-critical mobile Systems), June 17, 2007, in the framework of the 8th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2007).

- Member of the international organising committee of the 2000 International Conference on Information Society in the 21st Century: Emerging Technologies and New Challenges (IS'2000), Aizu-Wakamatsu City, Fukushima, Japan, 5-8 November 2000.

A.6.II Member of International Program Committees

- IPC member for the IASTED International Conferences on Applied Informatics:

  - 18th edition (AI'2000), Innsbruck, Austria, 14-17 February 2000.
  - 19th edition (AI'2001), Innsbruck, Austria, February 2001.
  - 20th edition (AI'2002), Innsbruck, Austria, February 2002.
  - 21th edition (AI'2003), Innsbruck, Austria, February 2003.

- IPC member for the EUROMICRO Conferences on Parallel, Distributed and Network-based Processing:

  - 14th edition (PDP-2006), Montbéliard-Sochaux, France, February 15–17, 2006.
  - 15th edition (PDP-2007), Naples, Italy, February 7–9, 2007.

- 16th edition (PDP-2008), Toulouse, France, February 13–15, 2008.
- 17th edition (PDP-2009), Weimar, Germany, February 18–20, 2009.
- 18th edition (PDP-2010), Pisa, Italy, February 17–19, 2010.
- 19th edition (PDP-2011), Ayia Napa, Cyprus, February 9–11 2011.

- IPC member for the EUROMICRO Workshop on Parallel, Distributed and Network-based Processing, Special Session on "Next Generation of Web Computing":

  - 14th edition (PDP-2006), Montbéliard-Sochaux, France, February 15–17, 2006.
  - 15th edition (PDP-2007), Napoli, Italy, February 7–9, 2007.
  - 16th edition (PDP-2008), Toulouse, France, February 13–15, 2008.
  - 17th edition (PDP-2009), Weimar, Germany, February 18–20, 2009.
  - 18th edition (PDP-2010), Pisa, Italy, February 17–19, 2010.
  - 19th edition (PDP-2011), Ayia Napa, Cyprus, February 9–11 2011.
  - 20th edition (PDP-2013), Belfast, Northern Ireland, 27th February–1st March 2013.

- IPC member for the EUROMICRO Conference on Software Engineering and Advanced Applications, Special Session on "Next Generation of Web Computing":

  - 32nd edition (SEAA 2006), Cavtat/Dubrovnik, Croatia, August 28th – September 1st, 2006.
  - 33rd edition (SEAA 2007), Lübeck, Germany, 27–31 August 2007.
  - 34th edition (SEAA 2008), Parma, Italy, 3–5 September, 2008.
  - 35th edition (SEAA 2009), Patras, Greece, 27–29 August, 2009.
  - 36th edition (SEAA 2010), Lille, France, 1–3 September, 2010.

- IPC member for the International Conferences on Advances in Mobile Multimedia:

  - 3rd edition (MoMM2005), Kuala Lumpur, Malaysia, September 19–21 2005.
  - 4th edition (MoMM2006), Yogyakarta, Indonesia, 4–7 December 2006.
  - 5th edition (MoMM2007), Yogyakarta, Indonesia, 3–5 December 2007.
  - 6th edition (MoMM2008), Linz, Austria, 24–26 November 2008.
  - 7th edition (MoMM2009), Kuala Lumpur, Malaysia, 14–16 December 2009.
  - 8th edition (MoMM2010), Paris, France, 8–10 November 2010.
  - 9th edition (MoMM2011), Hue City, Vietnam, 5–7 December 2011.
  - 10th edition (MoMM2012), Bali, Indonesia, 3–5 December 2012.

- IPC member for the International Conferences on Availability, Reliability and Security ("the Dependability Conferences"):

  - 2nd edition (AReS 2007), Vienna, Austria, April 10–13, 2007.
  - 3rd edition (AReS 2008), Barcelona, Spain, March 4–7, 2008.
  - 4th edition (AReS 2009), Fukuoka, Japan, March 16–19, 2009.
  - 5th edition (AReS 2010), Krakow, Poland, February, 15–18, 2010.
  - 6th edition (AReS 2011), Vienna, Austria, August 22–26, 2011.
  - 7th edition (AReS 2012), Prague, Czech Republics, August, 20–24, 2012.
  - 8th edition (AReS 2013), Regensburg, Germany, September 2nd–6th, 2013.

- IPC member for the International Symposia on Smart Home:

- 1st edition (IWSH-06), Cheju Island, Korea, November 10–11, 2006.
- 2nd edition (SH'07), Cheju Island, Korea, December 7–8, 2007.
- 3rd edition (SH'08), Hainan Island, China, December 13–15, 2008.
- 4th edition (SH'09), Toronto, Canada, July 13–16, 2009.

• IPC member for the International Conferences on Future Generation Communication and Networking:

- 1st edition (FGCN 2007), Jeju-Island, Korea, December 6–8, 2007.
- 2nd edition (FGCN 2008), Hainan Island, China, December 13–15, 2008.
- 3rd edition (FGCN 2009), Jeju Island, Korea, December 10–12, 2009.
- 4th edition (FGCN 2010), Bali, Indonesia, November 11–13, 2010.

• IPC member for the International Conferences on Next Generation Web Services Practices:

- 1st edition (NWeSP 2005), Seoul, Korea, August 22–26, 2005.
- 2nd edition (NWeSP 2006), Seoul, Korea, September 25–28, 2006.
- 3rd edition (NWeSP 2007), Seoul, Korea, October 29–31, 2007.
- 4th edition (NWeSP 2008), Seoul, Korea, October 20–22, 2008.
- 5th edition (NWeSP 2009), Prague, Czech Republic, September 9–11, 2009.
- 6th edition (NWeSP 2010), Goa, India, November 19–21, 2010.
- 7th edition (NWeSP 2011), Salamanca, Spain, October 19–21, 2011.
- 8th edition (NWeSP 2012), São Carlos, November 21–23, 2012.

• IPC member for the International Conference on Advances in Multimedia (MMEDIA):

- 1st edition (MMEDIA 2009), July 19-24, 2009, Colmar, France.
- 2nd edition (MMEDIA 2010), Athens, Greece, June 13-19, 2010.
- 3rd edition (MMEDIA 2011), Budapest, Hungary, April 17-22, 2011.
- 4th edition (MMEDIA 2012), Chamonix / Mont Blanc, France, April 29-May 4, 2012.
- 5th edition (MMEDIA 2013), Venice, Italy, April 21-26, 2013.

• IPC member for the 2000 International Conference on Information Society in the 21st Century: Emerging Technologies and New Challenges (IS'2000), Aizu-Wakamatsu City, Fukushima, Japan, 5-8 November 2000.

• IPC member for the 9th International Conference on High Performance Computing and Networking Europe (HPCN Europe 2001), Amsterdam, The Netherlands, June 2001.

• IPC member for the IASTED International Conf. on Parallel and Distributed Computing and Networks 2004 (PDCN 2004), Innsbruck, Austria, February 2004.

• IPC member for the IASTED International Conf. on Parallel and Distributed Computing and Networks 2005 (PDCN 2005), Innsbruck, Austria, February 2005.

• IPC member for the 2005 International Conference on High Performance Computing and Communications (HPCC-05), "Reliability, Fault-tolerance, and Security" track.

• IPC member for the Second International Workshop on Grid Computing and its Application to Data Analysis (GADA 2005), Agia Napa, Cyprus, November 1, 2005.

• IPC member for the Parallel and Distributed Computing and Networks (PDCN 2006) in the framework of the Twenty-Fourth IASTED International Multi-Conference on Applied Informatics, February 14–16, 2006, Innsbruck, Austria.

- IPC member for 22nd ACM Symposium on Applied Computing (SAC 2007), Special Track on Coordination Models, Languages and Applications.

- IPC member for the 2007 International Workshop on Service, Security and its Data management technologies in Ubi-com (SSDU-07), Nanjing, China, May 22–25, 2007.

- IPC member for the 8th IEEE International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC-07), March 26-30, 2007, Long Beach, California, USA.

- IPC member for the 2007 International Conference on Intelligent Pervasive Computing (IPC-07) Jeju Island, Korea, October 12–13, 2007.

- IPC member for the 2007 IEEE Three-Rivers Workshop on Soft Computing in Industrial Applications (SMCia/07), Passau, Germany, August 1–3, 2007.

- IPC member for the 3rd IEEE International Symposium on Dependable, Autonomic and Secure Computing (DASC'07) Loyola College Graduate Center, Columbia, MD, USA 25–27 September 2007.

- IPC member for the 2008 IEEE Conference on Soft Computing in Industrial Applications (SMCia/08), Muroran Hokkaido, Japan, 25–27 June 2008.

- IPC member 2009 IEEE Wireless Communications and Networking Conference (WCNC 2009).

- IPC member of the Fourth International Conference on Communications and Networking in China, Wireless Communications and Networking Symposium (ChinaCom2009-WCN), August 26–28, 2009, Xi'an, China.

- IPC member for the 20th International Conference on Database and Expert Systems Applications (DEXA'09), August 31–September 4, 2009, Linz, Austria.

- IPC member for the IEEE International Conference on Pervasive Services (ICPS-09), London, England, July 13–17, 2009.

- IPC member for the 2nd International Conference on Advanced Communication and Networking (ACN 2010), Miyazaki, Japan, June 23–25, 2010.

- IPC member of the Fifth International Conference on Communications and Networking in China, Wireless Communications and Networking Symposium (ChinaCom2010-WCN), August 25-27, 2010, Beijing, China.

- IPC member for EMC-10 (5th International Conference on Embedded and Multimedia Computing), Cebu, Philippines, August 11–13, 2010.

- IPC member for the 1st International workshop on Resilience Assessment of COmplex Systems (RACOS 2010), to be held in conjunction with the 28th IEEE International Symposium on Reliable Distributed Systems (SRDS 2010), Delhi, India, November 1–3, 2010.

- Member of the programme committee of the book *Architecting Dependable Systems VII* (Antonio Casimiro, Rogério de Lemos, and Cristina Gacek, Eds.), to appear in the Lecture Notes in Computer Science series, 2010.

- Technical Program Committee member for the 6th International Symposium on Wireless sensor network Technologies and Applications for Smart Space (WTA 2010), held in conjunction with the ACSA-10 symposium, Gwangju, Korea, December 9–11, 2010.

- Program Vice-Chair (Dependable, Reliable and Autonomic Computing) of the 13th IEEE International Conference on Computational Science and Engineering (CSE-2010), Hong Kong, China, December 11–13, 2010.

- IPC member for The International Conference on Digital Information and Communication Technology and its Applications (DICTAP2011), to be held at the Université de Bourgogne, France, June 21–23, 2011

- IPC member for the 21st International Conference on Database and Expert Systems Applications (DEXA'10), Bilbao, Spain, August 30–September 3, 2010.

- IPC member for the 22nd International Conference on Database and Expert Systems Applications (DEXA'11), Toulouse, France, August 29–September 2, 2011.

- IPC member for PoCA 2011 — International Conference on Positioning and Context-Awareness, Brussels, Belgium, 24 March 2011.

- IPC member for EMC-11 (6th International Conference on Embedded and Multimedia Computing), Enshi, China, 11–13 August 2011.

- IPC member for DEPEND 2011, the 4th International Conference on Dependability, Côte d'Azur, France, August 21–27, 2011.

- IPC member for IDEAS 2011, the 15th International Database Engineering & Applications Symposium, Lisbon, Portugal, September 21–23, 2011.

- IPC member for the 13th European Workshop on Dependable Computing (EWDC 2011) Pisa, Italy, 11–12 May 2011.

- IPC member for the 5th International Conference on Dependability (DEPEND 2012) Rome, Italy, August 19–24, 2012.

- IPC member for the 4th Int.l Conference on Computational Aspects of Social Networks (CASoN 2012), São Carlos, November 21–23, 2012.

- IPC member for J. Camara, R. de Lemos, C. Ghezzi, A. Lopes, Assurances for Self-Adaptive Systems, Lecture Notes in Computer Science, Springer.

- IPC member for the 7th International Symposium on Security and Multimodality in Pervasive Environment (SMPE-2013), Barcelona, Spain, March 25–28, 2013.

- IPC Member for the SASO 2012 – DEMO/CONTEST Track "The Self-* Challenge", 6th IEEE International Conference on Self-Adaptive and Self-Organizing Systems. Lyon, France, 10–14 September 2012.

- ICP member for SANES 2013 (Special session on Self-Adaptive Networked Embedded Systems), International Conference on Pervasive and Embedded Computing and Communication Systems (PECCS 2013), Barcelona, Spain, Feb 19–21, 2013.

- IPC member for the annual IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'13) – Services Applications and Business Track. London, UK, 8–11 September 2013.

- IPC member for the 4th Workshop on Service Discovery and Composition in Ubiquitous and Pervasive Environments (SUPE'2013), in the framework of the 10th International Conference on Mobile Web Information Systems (MobiWIS'2013), Cyprus, Greece, August 26-28, 2013.

- IPC member for the workshop "Formal Methods for Dependable Computer-Based Systems" (FMDEP'2013), affiliated with iFM 2013, Turku, Finland, June 10, 2013.

- IPC member for the 1st International World conference on Ambient Assisted Living (formerly IWAAL 2013,International Workshop on Ambient Assisted Living), Costa Rica, December 2013.

A.7 Participation in committees and meetings related to research

- 2007-2010: Member of the "Onderwijscommissie informatica", University of Antwerp.

- 2001-2004: Participation to the P.O.C. Meetings (Meetings of the Board of the Master in Artificial Intelligence programme), K.U.Leuven.

A.8 Other research activities or results

A.8.I Invited speaker

- Invited speaker at IMEC Academy, IMEC, Belgium, May 4, 2011 ("SSET seminar: Cost-Effective Software Reliability through Autonomic Tuning of System Resources.") Presentation available here.

- Invited speaker at the International Applied Reliability Symposium — Europe, Berlin, Germany, April 7–9, 2010 ("Cost-Effective Software Reliability through Autonomic Tuning of System Resources.")

- Invited speaker and panelist at the 2009 ACCESS-IT Workshop on ICT services for elderly to advance their independent living, London September 23, 2009 ("Mutual Assistance Community for AAL.")

- Invited speaker at WADS 2009, the DSN 2009 Workshop on Architecting Dependable Systems, Estoril, Portugal, 29 June 2009 ("On the Design of daptive-and-dependable Systems—Lessons learned and experiences at the University of Antwerp").

- Invited speaker at the workshop "Software Fault Tolerance for Embedded Applications", Centro Elettrotecnico Sperimentale Italiano, Milan, Italy, 14 December 2000 ("TIRAN: the software architecture"; "A fault tolerance functionality: the redundant watchdog").

- 1995-1996: Università di Bari. Invited speaker for a series of seminars in the framework of the mandatory specialization course for the 3rd year Computer Science "Linguaggi formali e compilatori".

A.8.II Session chair

- Sessions co-chair at the ADAMUS workshops (2007–2009).

- Session chair at the WoWMoM 2005 Conference (Session 2B: From 3G to 4G), Taormina / Giardini Naxos, Italy, June 13–16, 2005.

A.9 Reviewing of scientific papers

A.9.I Reviewing of Conference Papers

- Reviewer of 16 papers submitted to the 18th IASTED International Conference on Applied Informatics (AI'2000), Innsbruck, Austria, 14–17 February 2000.

- Reviewer of 3 papers submitted to the World Multiconference on Systemics, Cybernetics and Informatics (SCI'2000), Orlando, Florida, 23–26 July 2000.

- Reviewer of 5 papers submitted to the 2000 International Conference on Information Society in the 21st Century: Emerging Technologies and New Challenges (IS'2000), Aizu-Wakamatsu City, Fukushima, Japan, 5–8 November 2000.

- Reviewer of 5 papers submitted to the 9th Euromicro Workshop on Parallel and Distributed Processing (Euro-PDP'01), Mantova, Italy, 7–9 February 2001.

- Reviewer of 11 papers submitted to the 19th IASTED International Conference on Applied Informatics (AI'2001), Innsbruck, Austria, February 2000.

- Reviewer of 2 papers submitted to the International Conference on Dependable Systems and Networks (DSN-2001), Goteborg, Sweden, 1–4 July 2001.

- Reviewer of 5 papers submitted to the 9th International Conference on High Performance Computing and Networking Europe (HPCN Europe 2001), Amsterdam, The Netherlands, 25–27 June 2001.

- Reviewer of 4 papers submitted to the 10th Euromicro Workshop on Parallel and Distributed Processing (Euro-PDP'01), Mantova, Italy, 7–9 February 2001.

- Reviewer of 6 papers for AI2002 (20th IASTED International Conference on Applied Informatics), Innsbruck, Austria, Feb. 2002.

- Reviewer of 4 papers for Euro-PDP02 (10th Euromicro Workshop on Parallel and Distributed Processing), Las Palmas de Gran Canaria, Spain, Jan. 9–11, 2002.

- Reviewer of 4 papers for SAC-02 (17th ACM Symp. on Applied Computing), Madrid, Spain, March 10–14, 2002.

- Reviewer of 4 papers for Euro-PDP03 (11th Euromicro Workshop on Parallel and Distributed Processing), Genova, Italy, Jan. 9–11, 2003.

- Reviewer of 4 papers for SAC-03 (18th ACM Symp. on Applied Computing), Melbourne, USA, March 9–12, 2003.

- Reviewer of 1 paper for DSN04 (the International Conf. on Dependable Systems and Networks), Florence, Italy, June 28–July 1, 2004.

- Reviewer of 4 papers for SAC-04 (19th ACM Symp. on Applied Computing), Nicosia, Cyprus, March 14–17, 2004.

- Reviewer of 1 paper for TACAS 2004 (10th International Conf. on Tools and Algorithms for the Construction and the Analysis of Systems), March 29–April 2, 2004, Barcelona, Spain.

- Reviewer of 8 papers for the IASTED International Conf. on Parallel and Distributed Computing and Networks 2004 (PDCN 2004), Innsbruck, Austria, February 2004.

- Reviewer of 19 papers for the IASTED International Conf. on Parallel and Distributed Computing and Networks 2005 (PDCN 2005), Innsbruck, Austria, February 2005.

- Reviewer of 5 papers for the 2005 International Conference on High Performance Computing and Communications (HPCC-05).

- Reviewer of 7 papers for the First International Conference on Next Generation Web Services Practices (NWeSP-05), August 22–26, 2005, Seoul, Korea.

- Reviewer for one paper for the 8th International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWiM 2005).

- Reviewer of 3 papers for the 21st ACM Symposium on Applied Computing (SAC 2006), Special Track on Coordination Models, Languages and Applications.

- Reviewer for the Third International Workshop on Collaborative and Learning Applications of Grid Technology (CLAG 2006).

- Reviewer of 6 papers for the Parallel and Distributed Computing and Networks (PDCN 2006) in the framework of the Twenty-Fourth IASTED International Multi-Conference on Applied Informatics, February 14–16, 2006, Innsbruck, Austria.

- Reviewer of 3 papers for the 15th EUROMICRO Conference on Parallel, Distributed and Network-based Processing (PDP 2007), Naples, Italy, February 7–9, 2007.

- Reviewer of 5 papers for the Second International Conference on Next Generation Web Services Practices (NWeSP-06), September 25–October 09, 2006, Seoul, Korea.

- Reviewer of 3 papers for 22nd ACM Symposium on Applied Computing (SAC 2007).

- Reviewer of 5 papers for the 2007 International Conference on Intelligent Pervasive Computing (IPC-07) Jeju Island, Korea, October 12–13, 2007.

- Reviewer of 5 papers for the 2nd International Symposium on Smart Home (SH'07), Cheju Island, Korea, December 7–8, 2007.

- Reviewer of 5 papers for the 2nd International Conference on Availability, Reliability and Security (AReS 2007), April 10–13, 2007, Vienna University of Technology, Austria.

- Reviewer of 2 papers for the 8th IEEE International Workshop on Parallel and Distributed Scientific and Engineering Computing (PDSEC-07), March 26–30, 2007, Long Beach, California, USA.

- Reviewer of 5 papers for the 3rd International Conference on Availability, Reliability and Security (AReS 2008, The Dependability Conference), Barcelona, Spain, March 4–7, 2008.

- Reviewer of 2 papers for the 3rd International Symposium on Smart Home (SH'08).

- Reviewer of 1 paper for the 2008 International Conference on Future Generation Communication and Networking (FGCN-08), Hainan Island, China, December 13–15, 2008.

- Reviewer of 3 papers for the EUROMICRO Conference on Parallel, Distributed and Network-based Processing (PDP 2010), Special Session on "Next Generation of Web Computing".

- Reviewer of 5 papers for the 2009 International Conference on Future Generation Communication and Networking conference (FGCN-2009), Jeju Island, Korea, December 10–12, 2009.

- Reviewer of 2 papers for the Fifth International Conference on Availability, Reliability and Security (ARES 2010).

- Reviewer of 2 papers for the Second International Conference on Advances in Multimedia (MMEDIA 2010), Athens, Greece, June 13–19, 2010.

- Reviewer of 3 papers for the 2nd International Conference on Advanced Communication and Networking (ACN 2010), Miyazaki, Japan, June 23–25, 2010.

- Reviewer of 2 papers for EMC-10 (5th International Conference on Embedded and Multimedia Computing), Cebu, Philippines, August 11–13, 2010.

- Reviewer of 3 papers for the EUROMICRO Conference on Software Engineering and Advanced Applications, special session on "Next Generation of Web Computing", Lille, France, 1–3 September, 2010.

- Reviewer of 3 papers for the 6th International Conference on Availability, Reliability and Security (AReS 2011).

- Reviewer of 3 papers for the 13th European Workshop on Dependable Computing (EWDC 2011), Pisa, Italy, 11–12 May 2011.

- Reviewer of 2 papers for the Fourth International Conference on Advances in Multimedia (MMEDIA 2012), Chamonix / Mont Blanc, France, April 29–May 4, 2012.

- Reviewer of 4 papers for the International Conference on Advances in Mobile Multimedia (MoMM2012), Bali, Indonesia, 3–5 December 2012.

- Reviewer of 2 papers for the International Conference on Next Generation Web Services Practices (NWeSP 2012), São Carlos, November 21–23, 2012.

- Reviewer of 4 papers for the 7th International Symposium on Security and Multimodality in Pervasive Environment (SMPE-2013), Barcelona, Spain, March 25–28, 2013.

- Reviewer of 1 paper for the 5th International Conference on Advances in Multimedia (MMEDIA 2013), Venice, Italy, April 21-26, 2013.

A.9.II Reviewing of Journal Papers

- 2002–2004: Reviewer for the Journal of Systems Architecture, Parallel and Distributed Processing area, Elsevier publishing company. Reviewed 5 papers.

- 2005: Reviewer for the IEEE Transactions on Dependable and Secure Computing. Reviewed 1 paper.

- 2006: Reviewer for the International Journal of Computational Intelligence Research (IJCIR).

- 2006: Reviewer for the IEEE Transactions on Computers. Reviewed 1 paper.

- 2008: Reviewer for the Oxford Computer Journal. Reviewed 1 paper.

- 2009: Reviewer for the International Journal of Smart Home (IJSH). Reviewed 1 paper.

- 2009: Reviewer for the Elsevier Journal of Systems and Software. Reviewed 1 paper.

- 2010: Reviewer for the Elsevier Journal of Systems and Software. Reviewed 1 paper.

- 2010: Reviewer for the IET Proceedings – Software. Reviewed 1 paper.

- 2012: Reviewer for the IET Proceedings – Software. Reviewed 1 paper.

- 2012: Reviewer for Information Systems Frontiers. Reviewed 1 paper.

- 2012: Reviewer for Personal and Ubiquitous Computing, special issue on Advances in Context-Aware Mobile Services. Reviewed 1 paper.

A.9.III Reviewing of Books

- 2008: "The Handbook of Technology Management", John Wiley & Sons.

- 2010: Reviewed one chapter of "Architecting Dependable Systems VII," Antonio Casimiro, Rogério de Lemos, and Cristina Gacek, (Eds.), to appear in the Lecture Notes in Computer Science, 2010.

A.9.IV Editor-in-Chief or Member of the Editorial Board of Journals

- 2009–current: Editor-in-chief for the International Journal of Adaptive, Resilient and Autonomic Systems (IJARAS), IGI Global. ISSN: 1947-9220, EISSN: 1947-9239. 12 issues.

- 2009-current: Director for Journal and Conference Paper management of the Science and Engineering Support Center (SERSC, http://www.sersc.org)

- 2013: Member of the Editorial Board (EB) of the Journal on Reliable Intelligent Environments (Springer, 2013).

- 2009: Program Committee member for the Special issue on Adaptive Service Discovery and Composition Systems for Ubiquitous and Pervasive Computing at ACM Transactions on Autonomous and Adaptive Systems (ACM TAAS).

- 2009–current: Editorial Board (EB) member for the International Journal of Computing & Information Technology (IJCIT), ISSN: 0974-696X.

- 2008–current: EB member for the International Journal of Future Generation Communication and Networking (IJFGCN), ISSN 1738-995x.

- 2007–current: EB member for the International Journal of Smart Home (IJSH), ISSN 1975-4094.

B. Education

B.1 Teaching assignments

B.1.I Theory

- MINF2014: "Seminarie Computernetwerken"; Universiteit Antwerpen, M.Sc. Computer networks and distributed systems; taught in 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2012-2013; 84 hours.

- FLINFO02A24059: "Seminarie Informatica"; Universiteit Antwerpen, 2de licentie; taught in 2005-2006 and 2006-2007; 84 hours.

- HB49: "Advanced Computer Architectures"; Katholieke Universiteit Leuven, M.Sc. in Computer Sciences and Master in Artificial Intelligence; taught in 2001-2002, 2002-2003, and 2003-2004; 22,5 hours.

- ATHENS intensive course: "Advanced C Programming for Engineering"; Advanced Technology Higher Education Network / SOCRATES at the Katholieke Universiteit Leuven; taught in 2000-2001, 2001-2002, 2002-2003, and 2003-2004; 30 hours.

B.1.II Exercises

- HD70: "Advanced Computer Architectures: Exercises"; Katholieke Universiteit Leuven, M.Sc. in Computer Sciences and Master in Artificial Intelligence; taught in 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004; 10 hours.

- HJ82: "Ontwerpen voor de optie multimedia en signaalverwerking: seminaries"; Katholieke Universiteit Leuven, mandatory seminars for the 4th year Electrical Enginering, option Multimedia and Signal Processing; taught in 2000-2001 and 2001-2002; 35 hours.

- ATHENS seminars: "Dependable systems"; Advanced Technology Higher Education Network / SOCRATES at the Katholieke Universiteit Leuven; taught in 2000-2001; 3 hours.

- HC68: "Fouttolerante systemen en computerbeveiliging: oefeningen en practica"; Katholieke Universiteit Leuven, mandatory specialization course for the 5th year Electrical Engineering; taught in 1999-2000; 15 hours.

- "Linguaggi formali e compilatori: seminari" (Formal languages and compilers); Università di Bari (Italy); taught in 1995-1996; 9 hours.

B.2 Jury member, supervisor or promotor of bachelor and master degree students

- Promotor of Jens Van Duyse for his M.Sc. Thesis "Estimating quality of experience in Human-Computer Interactions," to be defended in June 2013.

- Promotor of Christophe De Decker for his M.Sc. Thesis "Adaptive OSGi Robotic Applications," defended in June 2011.

- Promotor of Roeland Dillen for his M.Sc. Thesis "Dependability Analysis of WSDM-enabled Web Services," defended in June 2011.

- Promotor of Héctor Toll Vallejo for his M.Sc. Thesis "Adaptive User Interfaces," defended in June 2011.

- 2009-2010: Co-promotor of 1 student (Pieter-Jan Pintens), M.Sc. Comp. Science program, University of Antwerp.

- 2009-2010: Co-promotor of 4 students, B.Sc. Comp. Science program, University of Antwerp.

- 2003-2004: Supervisor of 1 student (Ma Shulun), M.Eng. program, K.U.Leuven.

- 2003-2004: Supervisor of 8 students for their final project work, Master in Artificial Intelligence, option Engineering and Computer Science.

- 2002-2003: Supervisor of 5 students for their final project work, Master in Artificial Intelligence, option Engineering and Computer Science.

- 2001-2002: Assessor for 3 students (Sarah De Maeseneer, Ingrid Steppe, Veronique Stouten), M.Eng. program, K.U.Leuven.

- 2001-2002: Supervisor for 2 students (Nikolaas Bellemans, Christophe Poucet), M.Eng. program, K.U.Leuven.

- 2001-2002: Promotor for 3 students (Mieke Leeman, Jan Cappaerts, Ben Mees) for their final project work, Master in Artificial Intelligence, option Engineering and Computer Science.

B.3 Activities within the framework of tutoring and student counselling

- 1994-1995: Supervisor of a Croatian student of the University of Zagreb (J. Novak, faculty of electrical engineering and informatics) for his B.Sc. in Computer Science.

B.4 Participation in international exchange programmes (e.g. Erasmus, Socrates)

- ATHENS intensive course (Advanced Technology Higher Education Network / SOCRATES, 2000-2001): Advanced C Programming for Engineering. Scientific coordinator, organizer, full-time lecturer, and assessor. 20 students. 30 hours.

- ATHENS intensive course (Advanced Technology Higher Education Network / SOCRATES, 2001-2002): Advanced C Programming for Engineering. Scientific coordinator, organizer, full-time lecturer, and assessor. 18 students. 30 hours.

- ATHENS intensive course (Advanced Technology Higher Education Network / SOCRATES, 2002-2003): Advanced C Programming for Engineering. Scientific coordinator, organizer, full-time lecturer, and assessor. 14 students. 30 hours.

- ATHENS intensive course (Advanced Technology Higher Education Network / SOCRATES, 2003-2004): Advanced C Programming for Engineering. Scientific coordinator, organizer, full-time lecturer, and assessor. 21 students. 30 hours.

- ATHENS intensive course (Advanced Technology Higher Education Network / SOCRATES, 2000-2001): Dependable systems. Two seminars ($2 \times 1.5h$).

B.5 Development of educational tools

- "Seminarie Computernetwerken",2nd Licence in Computer Science, University of Antwerp, for the Academic year 2007-2008, 2008-2009, 2009-2010: development of the course notes (4 lectures, 90' each) and syllabus.

- "Seminarie informatica", 2nd Licence in Computer Science, University of Antwerp, for the Academic year 2006-2007: development of the course notes (1 lecture, 90') and syllabus.

- "Seminarie informatica", 2nd Licence in Computer Science, University of Antwerp, for the Academic year 2005-2006: development of the course notes (1 lecture, 90') and syllabus.

- HB49 "Advanced Computer Architectures": Development of the course notes and syllabus. Course notes available here.

- HJ82 "Ontwerpen voor de optie multimedia en signaalverwerking: seminaries (2000-2001 and 2001-2002, mandatory seminars for the 4th year Electrical Engineering, option Multimedia and Signal Processing): development of the course notes of two seminars on "Introduction to the C Language and Assembly Programming for the TI MSP430 Microcontroller". Development of the software for the exercise sessions. Course notes available on request.

- ATHENS intensive course Advanced C Programming for Engineering (2000-2001 and 2001-2002, Advanced Technology Higher Education Network / SOCRATES): development of the course notes and of the software for the exercise sessions. Course notes available on request.

- HD70 Advanced computer architectures: exercises (2001-2002, optional component, Computer Science and Master in Artificial Intelligence): development of the course notes.

- Linguaggi formali e compilatori (1995-1996, mandatory specialization course for the 3rd year Computer Science, Università di Bari): development of the course notes for three seminars.

B.6 Educational professionalisation

- Numerous research presentations and seminars at the University of Antwerp (2004–current).

- Numerous research presentations and seminars at the ESAT Department of the University of Leuven (1996–current).

- Seminar "A system structure for application-level fault tolerance based on a middleware linguistic architecture", presented at the Department of Computer Science, University of Leuven, 26 March 2000.

- One-week intensive course "Discrete event simulation", by A.M. Blum and P. Heidelberger (Yorktown Heights IBM Center). SASIAM school, Bari, Italy, 3-7 November 1986.

- Seminar "Neural and concurrent real-time systems", by B. Soucek. University of Bari, Italy, 18-19 December 1989.

- One-week intensive course "Numerical and symbolic parallel computation", by J.S. Kowalik (Washington University). University of Calabria, 15-19 October 1990.

- Seminar "Nuovi standard per LAN e MAN" (Novel LAN and MAN standards), by Mario Gerla (UCSD), University of Bari, November 1990.

- Three-day intensive course "Principi e tecniche di programmazione della Connection Machine" (Principles and programming techniques for the Connection Machine), by P. Rossi and H. Voorhels (Thinking Machines), University of Parma, 13-15 December 1990.

- Short course "Programmazione concorrente ad ambiente locale" (Concurrent programming in local environment), by R. Perego (Italian National Research Council, CNUCE institute), Tecnopolis CSATA, Bari, Italy, 8-9 May 1991.

- Short course "Utilizzo di CSTools e Meiko Computing Surface" (Use of CS-Tools and the Meiko Computing Surface 1), by R. Fruscione (Meiko), CNR IESI Institute, Bari, 15-16 May 1991.

- Advanced short course on parallel computing, by I. Duff, J. Dongarra et al., CERFACS, Toulouse, 9-11 June 1992.

- Short course "Corso sul linguaggio parallelo LINDA" (the LINDA parallel language), by D. Laforenza and R. Perego, LogPar, Milano, Ital,y, 13-15 December 1992.

- HC67 "Fouttolerante systemen en computerbeveiliging" (fault-tolerant systems and computer security), mandatory specialisation course for the 5th year Electrical Engineering, academic year 1996-1997.

- HB49 "Advanced computer architectures" (optional component of the Master in Artificial Intelligence), academic year 1996-1997.

- H358 "Computernetwerken en gedistribueerde systemen" (optional course for the 3rd year Computer Science, academic year 1996-1997.

- Elementary Dutch, GroepT Hogeschool, Leuven (two years).

- Intermediate Dutch, GroepT Hogeschool, Leuven (two years).

B.7 Visiting lectureships abroad

- Invited lecturer at ParisTech, Paris, in the framework of their European Summer University: course "Advanced C Programming", two week intensive course (2004 and 2005, canceled).

- Invited lecturer at the University of Erlangen-Nürnberg, Nürnberg, Germany: lecture "Application-layer Fault-tolerance Protocols".

B.8 Participation in committees and meetings related to teaching

- Observing member of the Permanent Educational Committee (Permanente Onderwijscommissie – POC) of the Artificial Intelligence (AI) program, K.U.Leuven (2002–2004).

C. Services

C.1 Activities in academic associations and institutions

- 1992-1995: SASIAM (School for Advanced Studies in Industrial and Applied Mathematics, Tecnopolis Novus Ortus research centre, str. Prov. Per Casamassima km.3, I-70010 Valenzano. Formerly part of ECMI and running an ECMI-certified Master Programme in Industrial and Applied Mathematics). Assignment: lecturer, tutor, assessor, researcher.

- 1995-1996: Università di Bari. Invited speaker for a series of seminars in the framework of the mandatory specialization course for the 3rd year Computer Science course "Linguaggi formali e compilatori."

- 2001-2004: ParisTech: lecturer of ATHENS course "Advanced C Language for Engineering".

- 2004-2005: Lectureship at ParisTech, Paris, in the framework of their European Summer University: course "Advanced C Programming", two week intensive course (canceled.)

C.2 Contributions to the dissemination or popularisation of learning

- 24 October 1994. Article describing the novel services available through the World-Wide Web. Appeared in the scientific column of the nationwide newspaper La Gazzetta del Mezzogiorno. Title of the article : "Enciclopedia globale sfogliando il computer — l'ipertesto a Tecnopolis" (Browsing a world-wide encyclopaedia with a computer — the hypertext in Tecnopolis. Tecnopolis is the name of the research centre for which I worked from 1990 to 1996.)

C.3 Other academic service activities

- Appointed as referee for the assignment of funds for university research groups by the Italian Ministry for Education University and Research (MIUR) (2012 and 2013).

- Appointed by the Natural Sciences and Engineering Research Council of Canada (NSERC) for the evaluation of a Discovery Grant proposal (2012).

- Appointed by the Forschungsförderungsfond für die gewerbliche Wirtschaft (Austria) as evaluator of the project proposals in the framework of the Austrian "FIT-IT" research program and to participate in their evaluation in Vienna on September 23, 2002. Time dedicated to the activity: 10 days. Remuneration: 2150 euros, travel and accommodation expenses.

- Course holder of "Linguaggio C in ambiente UNIX" (C language in UNIX environments, 1994-1995), mandatory component of the SASIAM (ECMI School for Advanced Studies for Industrial and Applied Mathematics) master programmes Tecniche avanzate di calcolo per applicazioni industriali (Advanced computing techniques for industrial applications) and Informatica e matematica industriale (Industrial informatics and mathematics). SASIAM school, Italy (2×250h).

- Lecturer of the course "Informatica" (Informatics), secondary school Enapaica, Bari, Italy, 1990-1991 (approximately 150 hours).

- Member of IEEE for 6 years.

- Member of EWICS-TC7 (the European Workshop on Industrial Computer Systems, Technical Committee on Reliability, Safety and Security) for 4 years.

  An up to date version of this curriculum can be found at the following addresses: http://www.win.ua.ac.be/~vincenz/ecv.html (HTML version), http://www.win.ua.ac.be/~vincenz/ecv.pdf (PDF version.)