

Curriculum Vitae – March 2015

Danny Weyns

Contact Information

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<http://www.lnu.se/adaptwise>

Education, Degrees

5/2013 Full professor in Computer Science, Software Engineering
Linnaeus University Sweden

11/2011 Docent (HDR, hoogleraar) in Computer Science, Software Engineering
Linnaeus University Sweden

10/2006 PhD in Engineer Science, Computer Science
Katholieke Universiteit Leuven, Belgium
“An Architecture-Centric Approach for Software Engineering of Situated
Multiagent Systems”

Master Master in Electronics, Katholieke Hogeschool Geel, Belgium
Master in Applied Informatics, Katholieke Universiteit Leuven (6/2001)

Post-graduate Certificate ATAM Evaluator (2/2010)
Certificate Software Architecture Professional (9/2010)
Carnegie Mellon University, Software Engineering Institute, USA

Employment

Current Employment Professor in Software Engineering
Head of AdaptWise Research Group
Department of Computer Science
Linnaeus University, Campus Växjö

10/2006-2/20011 Post-doctoral fellow Research Foundation Flanders (FWO)
DistriNet Labs, Department of Computer Science
Katholieke Universiteit Leuven Belgium

9/2001-10/2006 Research Assistant
DistriNet Labs, Department of Computer Science
Katholieke Universiteit Leuven Belgium

Academic Grants, Awards and Visits

Grants

10/2010-2/2011 Post Doctoral Researcher funded by the Research Foundation Flanders (FWO)
“A framework for decentralized self-adaptive systems”

10/2007-9/2010 Post Doctoral Researcher funded by the Research Foundation Flanders (FWO)
“Architecture description language for decentralized software systems”

1/2007-10/2007 Post Doctoral Researcher funded by the Katholieke Universiteit Leuven (PDM)
"Web service composition with multi-agent systems"

Awards

2012 Marie Curie Career Integration Grant
2007 Finalist for the Cor Baayen Award for a most promising young researcher in computer science and applied mathematics by European Research Consortium for Informatics and Mathematics (ERCIM)

Research Visits

6/2010-7/2010 Visiting researcher at the Université de Bretagne-Sud, France funded by the Researcher Research Foundation Flanders (FWO)
"Formal Specification of Architectural Patterns for Multi-Agent Systems"
5/2009-12/2009 Visiting researcher at the Université de Bretagne-Sud, France funded by the Researcher Research Foundation Flanders (FWO)
"Formal modeling of dynamic software architectures of decentralized systems"
26/4-2/5 2008 Short visit Carnegie Mellon University, Software Engineering Institute, Pittsburgh USA funded by the Researcher Research Foundation Flanders (FWO)

Projects

2015-2016 BoConnect - Reliable Assistive Technologies to Empower Elderly People to Live Independently Longer (3 M\$ek, PI), Kamprad Family Foundation Sweden
2014-2015 Push The Line! Reliable Assistive Technologies to Enhance Independence of Elderly After Hospitalization (500 K\$ek, PI with Göran Petersson), Vinnova Sweden
2014-2017 Assurances for Decentralized Self-Adaptive Systems (3.4 M\$ek, PI), Swedish Research Council, Vetenskapsrådet (8,7% accepted projects)
2012-2015 A Foundation for Engineering Decentralized Self-Adaptive Software Systems (100 K€, PI), Marie Curie CIG funded by FP7
2012-2013 CareSmart: Improving Welfare Services for Elderly People Using Smart Homes (PI), funded by Nybro Kommun (<http://www.nybro.se/>) and IEC ([Inu.se/iec](http://www.inu.se/iec)) In this project, we performed a domain study and identified needs for improving the welfare services of a Swedish municipality using smart home technology.
4/2009-3/2011 Software Product Lines for Logistic Systems (E'SPLS) in collaboration with Egemin (PI), funded by the Institute for the Promotion of Innovation through Science and Technology in Flanders. In this project we developed and empirically validated an architectural approach for online updates of deployed software product line products.
1/2004-3/2007 Egemin Machine Control Centre (EMC2) in collaboration with Egemin (Lead software architect), funded by Institute for the Promotion of Innovation through Science and Technology in Flanders. In this project, we studied, developed, and evaluated a decentralized control system for automatic guided vehicles.

Ph.D & Master Students

Current Ph.D students

From 3/2014 Stepan Shevtsov, Assurances in Self-Adaptive Software Systems. Supervisor.
From 2/2014 Sara Mahdavi-Hezavehi, Architecture-Based Self-Adaptation for Multiple Concerns. Supervisor (with Paris Avegeriou, Groningen University)
From 2/2012 Usman Iftakhir, A Formal Approach to Engineer Self-Adaptive Software Systems. Supervisor

Previous Ph.D students

2012-5/2014 Didac Gil de la Iglesia, A formal approach for designing distributed self-adaptive systems. Supervisor.

2006-2/2012	Robrecht Haesevoets, Katholieke Universiteit Leuven, A middleware for dynamic organizations of agents. Supervisor.
2010-2/2012	Bartosz Michalik, Katholieke Universiteit Leuven, An architecture approach to support online updates of software products. Supervisor.
2005-10/2009	Nelis Boucké, Katholieke Universiteit Leuven, Composition and relations of architectural models supported by an ADL. Counselor.

Ph.D committees

From 2014	Janosch Zbick, Linnaeus University (examinator)
From 2012	Tobias Ohlsson, Linnaeus University (examinator)
	Daniel Toll, Linnaeus University (examinator)
From 2010	Stijn Vandael, Katholieke Universiteit Leuven, Coordination patterns for charging plug-in hybrid vehicles in a Smart Grid (supervision committee)

External Ph.D jury

2014	Martin Meyer, Dublin City University, Ireland
2014	Stefano Sebastio, IMT Institute for Advanced Studies Lucca, Italy
1/2014	Evesti Antti, University of Oulu, Finland (external reviewer)
9/2013	Markus Luckey, Paderborn University, Germany
6/2013	Illir Jusufi, Linnaeus University, Sweden
5/2013	Tobias Gutzmann, Linnaeus University, Sweden
4/2013	Koen Yskout, Katholieke Universiteit Leuven, Belgium
1/2012	Koen Buyens, Katholieke Universiteit Leuven, Belgium
9/2011	Elke Steegmans, Katholieke Universiteit Leuven, Belgium
7/2011	Maarten Bynens, Katholieke Universiteit Leuven, Belgium
9/2010	Nadeem Akhtar, Université de Bretagne-Sud, France
2/2010	Maruf Pasha, France, Université de Bretagne-Sud, France

Current Master students

2014	Ruan Yifan, A Telecare Rehabilitation Service for Elderly People
2014	Andrii Gamaiunov, Supporting Elderly People at Home Using a Web-based Platform for Activity Monitoring
2014	Igor Piddubnyi, MVC Patterns, A Systematic Literature Review

Previous Master students

2013	Tanvir Ahmad, Claims and Supporting Evidence for Self-Adaptive Systems: A Systematic Literature Review
2012	Joanna Juziuk, Design Patterns for Multi-Agent Systems
2011	Masuma Naqvi, Claims and Supporting Evidence for Self-Adaptive Systems
2010	Pieter Vromant, Interacting control loops in self-adaptive systems
2009	Thomas Borgs, An aspect-oriented framework for self-adaptive software systems: design and evaluation
	Wouter Labeeuw, Prediction of congested traffic on the critical density point using machine learning and decentralized collaborating sensors
2008	Jesper Bonquet, Mante Bos, Detecting toxic clouds with a sensor network
2007	Wouter Delbaere and Bart Lamberigts, Flexible integration of functionalities in a decentralized AGV transportation system
2006	Bart Demarsin, DynCNET: A protocol for flexible transport assignment in AGV transportation systems
2005	Wannes Schols, Gradient field based order assignment in AGV systems
	Els Helsen, Koen Deschacht, Delta framework for situated multi-agent systems
2004	Luc Claesen, Regional synchronization in situated multi-agent systems
	Nelis Boucke, Situated multi-agent approach for distributing control in automatic guided vehicle systems
	Robin Custers, The Agent Network Architecture extended for cooperative robots
	Andy Holvoet, Simulation of a file management system in a P2P-network
2003	Olivier Glorieux, A model for adaptive agents applied to the Packet World

Jonas De Meulenaere, Stigmergy applied in the Packet-World.
Bart Vandeweerd, Model for the environment in reactive multi-agent systems.

Selection of publications

- M. Galster, D. Weyns, D. Tofan, B. Michalik, and P. Avgeriou, Variability in Software Systems - A Systematic Literature Review, *IEEE Transactions on Software Engineering* 40(3), 2014 (TSE) [JCR 2.56]
- R. Haesevoets, D. Weyns, T. Holvoet, Architecture-Centric Support for Dynamic Service Collaborations, *ACM Transactions on Software Engineering and Methodology (TOSEM)*, 23(1), 2013 [ISI 5-year: 2.4]
- D. Weyns, S. Malek, J. Andersson, FORMS: Unifying Reference Model for Formal Specification of Distributed Self-Adaptive Systems, *ACM Transactions on Autonomous and Adaptive Systems (TAAS)*, 7(1), 2012 [ISI 5-year: 1.7]
- D. Weyns, A. Helleboogh, R. Haesevoets, T. Holvoet, W. Joosen, The MACODO Middleware for Context-Driven Dynamic Agent Organizations, *ACM Transaction on Adaptive and Autonomous Systems (TAAS)*, 5(1), 2010 [ISI 5-year: 1.7]
- R. Claes, T. Holvoet and D. Weyns, A Decentralized Approach for Anticipatory Vehicle Routing using Delegate Multi-Agent Systems, *IEEE Transactions on Intelligent Transportation Systems (TITS)*, 12 (2), pp. 364-373, 2011 [ISI 5-year: 4.1]
- D. Weyns, M. Georgeff, Self-adaptation using multiagent systems, *IEEE Software*, 27(1), 2010 [JCR 1.51]
- N. Boucke, D. Weyns, T. Holvoet, Composition of Architectural Models: Empirical Analysis and Language Support, *Journal of Systems and Software (JSS)*, 83(11), 2010 [ISI 5-year: 1.3]
- D. Weyns, N. Boucke, and T. Holvoet, A Field-Based Versus a Protocol-Based Approach for Adaptive Task Assignment, *Journal on Autonomous Agents and Multi-Agent Systems (JAAMAS)*, 17(2), pp. 288-319, 2008 [ISI 5-year: 2.8]
- D. Weyns, A. Omicini, and J. Odell, Environment as a first-class abstraction in multiagent systems, *International Journal on Autonomous Agents and Multi-Agent Systems (JAAMAS)*, 14 (1), pp. 5-30, 2007 [ISI 5-year: 2.8, Google Scholar 3/2015: 311 citations]
- D. Weyns, *Architecture-Based Design of Multi-Agent Systems*, Springer, ISBN: 978-3-642-01063-7, 2010
- D. Weyns and T. Ahmad, Claims and Evidence for Architecture-Based Self-Adaptation: A Systematic Literature Review, *European Conference on Software Architecture, ECSA 2013*
- U. Iftikhar and D. Weyns, ActivFORMS: Active Formal Models for Self-Adaptation, *Software Engineering for Adaptive and Self-Managing Systems*, 2014 (18.5% accepted)
- A. Syromiatnikov and D. Weyns, A Journey Through the Land of Model-View-* Design Patterns, *Working International Conference on Software Architecture, WICSA 2014*
- D. Weyns, U. Iftikhar and J. Söderlund, Do External Feedback Loops Improve the Design of Self-Adaptive Systems? A Controlled Experiment, *Software Engineering for Adaptive and Self-Managing Systems*, 2013
- D. Gil de la Iglesia and D. Weyns, Guaranteeing Robustness in a Mobile Learning Application Using Formally Verified MAPE Loops, *Software Engineering for Adaptive and Self-Managing Systems*, 2013
- D. Weyns, B. Schmerl, V. Grassi, S. Malek, R. Mirandola, C. Prehofer, J. Wuttke, J. Andersson, H. Giese, and K. Goschka, On Patterns for Decentralized Control in Self-Adaptive Systems, *Software Engineering for Self-Adaptive Systems, SefSAS II, Lecture Notes in Computer Science vol. 7475*, Springer, 2012
- B. Michalek, D. Weyns, A. Helleboogh, N. Boucke, Reconstructing Architectural Models to Support SPL Products Updates: A Controlled Experiment, *5th International Symposium on Empirical Software Engineering and Measurement, ESEM 2011*
- D. Weyns, B. Michalek, A. Helleboogh, N. Boucke, An Architectural Approach for Online Updates of Software Product Lines, *9th Working IEEE/IFIP Conference on Software Architecture, WICSA 2011*
- D. Weyns, T. Holvoet, K. Schelfhout, J. Wielemans, Decentralized Control of Automatic Guided Vehicles: Applying Multi-Agent Systems in Practice, *ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications, Development Track OOPSLA 2008*
- D. Weyns, H. Parunak, F. Michel, T. Holvoet, and J. Ferber, Environments for multi-agent systems, state-of-the-art and research challenges, *LNCS vol 3374*, 2005 [Google Scholar 5/2014: 250 citations]

D. Weyns, K. Schelfhout, T. Holvoet, and T. Lefever, Decentralized control of E'GV transportation systems, International Conference on Autonomous Agents and Multiagent Systems, AAMAS 2005 [Google Scholar 3/2015: 103 citations]

Citation Analysis (Google Scholar 3/2015)

h-index: 31

Total number of citations: 3866

Committees and Boards

Since 2014	Associated editor Journal on Autonomous Agents and Multiagent Systems JAAMAS
Since 2012	Steering committee Engineering Multiagent Systems, EMAS
Since 2011	Associated editor International Journal on Agent-Oriented Software Engineering
Since 2007	Editorial board of the International Journal on Multiagent and Grid Systems
Since 2012	IG Leader Information Engineering Center, IEC (Inu.se/iec)
2008-2012	Management Committee EU COST Action IC0801 on Agreement Technologies
Since 2013	PhD Faculty Commission, Technology Faculty, Linnaeus University
2007-2009	PhD Faculty Commission, Engineering Faculty, Katholieke Universiteit Leuven
2004-2005	Chair Technical Forum ENV, AgentLink 6th Framework Program EU

Invited Talks, Tutorials & Seminars

Invited talks, tutorials

2013	Assurances in Self-Adaptive Systems, SERENE Autumn School, Kharkiv, Ukraine
2012	An Architectural Approach to Support Online Updates of SPL Products, CREST, University College London, UK
2010	Middleware support for multi-agent systems, International Workshop on Infrastructures and Tools for Multiagent Systems, AAMAS, Toronto Canada
2010	Engineering Self-Adaptive Systems, PUC Rio, Brazil
2008	Wireless Sensor Networks and Multiagent Systems, (Co-tutor with E. Platon)
2008	10th European Agent Systems Summer School, Estoril, Portugal
2008	Multi-agent based coordination of AGVs with task assignment based on potential fields, 2nd Almende Summer School, Rotterdam, The Netherlands
2006	Environments in Multiagent Systems, 8th European Agent Systems Summer School, Annecy, France
2006	Architecture-centric perspective on software engineering of multi-agent systems, 4th European AgentLink Technical Forum, Lisbon, Portugal
2006	On the connection between multi-agent systems and software architecture, 7th Int. Workshop on Engineering Societies in the Agents World, Dublin Ireland
2005	From reactive robotics to situated multiagent systems, International Workshop on Engineering Societies in the Agents World, Turkey

Invited Seminars

Dec. 15-19, 2013	Dagstuhl Seminar 13511, Software Engineering for Self-Adaptive Systems: Assurances (Chairs: R. de Lemos, D. Garlan, C. Ghezzi, H. Giese)
Oct. 24-29, 2010	Dagstuhl Seminar 10431, Software Engineering for Self-Adaptive Systems (Chairs: R. de Lemos, H. Giese, H. Muller, M. Shaw)
Jan. 10-15, 2010	Seminar 10021, Service-Oriented Architecture and Multiagent Systems Technology (Chairs: M.Calisti, F.Dignum, R.Kowalczyk, Leymann, R.Unland)

Jan. 13-18, 2009	Dagstuhl Seminar 08031, Software Engineering for Self-Adaptive Systems (Chairs: B. Cheng, R. de Lemos, H. Giese, P. Inverardi, J. Magee)
Sept. 9-12, 2013	NII Shonan meetings, EASSy: Engineering Adaptive Software Systems (Chairs: H. Muller, Y. Yu, S. Honiden, J. Mylopoulos)
Industry course 2009	Turning software architecture into a competitive advantage using ISO 42010, 2-day course for ICT Professionals (with Alexander Helleboogh), Katholieke Universiteit Leuven, December 7-8, 2009

Teaching Experience

Academic courses (2012-2015 – Linnaeus University, Sweden)

Master Courses Software Technology, Computer Science (self-developed)

1. Architectures for Service Based Systems

Topics: principles of service-oriented computing, standards and technologies, SOA, composition of services, roles and organization abstractions for service composition, advanced project

2. Adaptive Software Systems

Topics: principles of components, self-adaptation, principled models and frameworks, software product lines, variability, architectures, advanced project

3. Advanced Software Design

Topics: view-based architectural descriptions, decision-making and rationale in architectural design, from architecture to detailed design and implementation, risks in design, advanced project

Bachelor Course Software Technology, Computer Science (self-developed)

Software Architecture

Topics: historical background of software architecture, principles of architectural design, documenting software architecture, evaluation of software architecture, future trends in software architecture

PhD Level Course - Capita Selecta Software Architecture

Study and critical reflection on selected topics in software architecture and self-adaptive systems

Previous academic courses (2011-2012 - Linnaeus University, Sweden)

Master Courses Software Technology, Computer Science

1. Webservices

Topics: historical perspective, principles of Webservices, standards and technologies, service-oriented architecture, Webservice coordination and composition, advanced topics, advanced project

2. Software from Components

Topics: principles of components, middleware platforms, software product lines, variability, architectures for software product lines, advanced project

3. Advanced Software Design

Topics: view-based architectural descriptions, decision-making and rationale in architectural design, from architecture to detailed design and implementation, risks in design, advanced project

PhD Level Course - Capita Selecta Software Architecture

Study and critical reflection on selected topics in software architecture and self-adaptive systems

Previous academic courses (2001-2011 – Katholieke Universiteit Leuven, Belgium)

Master Courses Informatics & Master in de Engineering: Computer Science

1. Capita Selecta on Distributed Systems - Autonomic Computing (2006 - 2011)

Topics: principles of autonomic computing, self-adaptive systems, decentralized architectures for self-adaptive systems, dynamic software architectures, reflection and self-adaptation

2. Distributed Software Architecture – Advanced Study (2006 - 2011) (self-developed)

Topics: view-based architectural descriptions, rational for architectural decisions, architectural patterns for distributed computing, advanced project

3. Principles of Programming (2001-2006)

Topics: basic algorithms, classes and objects, encapsulation and information hiding, advanced algorithms, recursion, correctness proofs, complexity of algorithms

Bachelor Courses in Electronics (Leuven, Belgium)

1. Digital electronics (2001-2009) (self-developed)

Topics: logics, basic ports, flop-flops, digital memory, counters, advanced digital circuits

2. Microcontrollers and networks (2001-2011) (self-developed)

Topics: microcontroller architectures, basic structures C language, I/O, interrupts, timers, AD and DA conversion, practical exercises

3. Thesis projects

Supervisor of about 20 thesis projects.

Bachelor Courses in Electronics (Brussels, Belgium)

From 1986 to 2001, I was lecturer at the Hogeschool voor Wetenschap en Kunst, Brussels where I was responsible for courses on electronics and networks, including: Digital techniques, Transmission lines, Power electronics, Automotive electronics, Networks. During this period, I was thesis supervisor of around 15 Bachelor students.

Organizational and Editorial Activities

Organizational activities

- 2015 - Co-organizer (with T. Bures, M. Klein, R. Haber) of International Workshop on Software Engineering of Smart Cyber Physical Systems, at ICSE 2015
- 2014 - Initiator and co-organizer (with H.V.D. Parunak, F. Michel, Olivier Boissier, Michael Schumacher, Alessandro Ricci) of International Workshop on Environments in Multiagent Systems – 10 Years Later, Paris, May 2014
- 2014 - Co-organizer (with Matthias Galster, Paris Avgeriou, and Tomi Mannisto) of the 3th International Workshop on Variability in Software Architecture VARSA, at Working International Conference on Software Architecture, Sydney, Australia, April 2014
- 2012 - Co-organizer (with Matthias Galster, Paris Avgeriou, and Martin Becker) of the 2nd International Workshop on Variability in Software Architecture VARSA, at Working International Conference on Software Architecture, Helsinki, Finland, August 2012
- 2011 - Co-organizer (with Matthias Galster, Paris Avgeriou, and Tomi Mannisto) of the 1st International Workshop on Variability in Software Architecture VARSA, at Working Intern. Conference on Software Architecture, Boulder, USA, 2011
- 2010 - Co-workshop chair (with Joerg Mueller) of the 12th International Workshop on Agent-Oriented Software Engineering AOSE, at 10th Intl. Conference on Autonomous Agents and Multiagent Systems AAMAS, Taiwan, May 2011
- 2010 - Co-workshop chair (with Rafael Capilla) of the 4th European Conference on Software Architecture ECSA, Copenhagen, August 23-26, 2010
- 2010 - Co-organizer (with Sam Malek, Jesper Andersson, and Bradley Schmerl) of the Second International Workshop on Self-Organizing Architectures SOAR, at the 7th International Conference on Autonomic Computing and Communications ICAC, Washington, DC, USA, June 7th, 2010
- 2010 - Co-organizer (with Marie-Pierre Gleizes) of the 11th International Workshop on Agent Oriented Software Engineering AOSE, at the 9th International

- Conference on Autonomous Agents and Multiagent Systems AAMAS, Toronto Canada, May 10, 2010
- 2009 - Co-organizer (with Sam Malek, Rogério de Lemos, and Jesper Andersson) of the International Workshop on Self-Organizing Architectures SOAR, at the Joint Working IEEE/IFIP Conference on Software Architecture and European Conference on Software Architecture, University of Cambridge, UK, WICSA/ECSA 2009
- Organizer of the Special Session on Coordination of Agents Inspired by Natural Systems at the Winter Simulation Conference, Austin, USA, WSC 2009.
- Co-chair (With Paolo Giorgini) of Exhibits & Demo Track, International Joint Conference on Autonomous Agents and Multiagent Systems AAMAS 2009
- 2008 - Co-organizer (with Sven Brueckner and Yves Demazeau) of the International Workshop on Environment-Mediated Coordination of Self-Organizing and Self-Adaptive Systems ECOSOA, at 2nd International Conference on Self-Organizing and Self-Adaptive Systems, SASO, Venice, Italy, SASO, 2008
- Coordinator of the Session on the Future of Software Engineering and Multiagent Systems FOSE-MAS, at 7th Joint Conference on Autonomous Agents and Multiagent Systems, Estoril, Portugal, AAMAS 2008
- Co-organizer (with A. Ricci, E. Platon, and F. Ishikawa) of the Track on Agent-Oriented Programming, Systems, Languages, and Applications, APSLA, at the 23rd Annual ACM Symposium on Applied Computing, Brazil, 2008
- Co-organizer (with R. Hilliard and N. Boucké) of Session on Relationships Between Architectural Views at Working International Conference on Software Architecture, Vancouver, Canada, WICSA 2008
- 2007 Initiator and co-organizer (with Sven Brueckner and Yves Demazeau) of International Conference on Engineering Environment-Mediated Multiagent Systems, Dresden, Germany
- 2004-2006 Initiator and co-organizer (with H.V.D. Parunak en F. Michel) of the series of International Workshops on Environments in Multiagent Systems, New York 2004, Utrecht 2005, Hakodate 2006
- 2006 Organizer and chair of the Special Track on Multiagent Systems and Software Architecture at the Internationale Conference Net.ObjectDays Erfurt, Germany
- 2005 Chair of the European AgentLink Technical Forum, Track Environments for Multiagent Systems, Forum II in Budapest, Forum III in Ljubljana

Editorial activities

- 2015 - Guest editor with Joerg Mueller of Special Issue on Challenges in Agent-Oriented Software Engineering in Knowledge Engineering Review (in press)
- 2014 - Guest editor with Matthias Galster, Paris Avgeriou, and Tomi Männistö of Special Issue on Variability in Software Architecture, Systems in the Journal on Systems and Software, vol. 91, 2014
- 2012 - Guest editor with Sam Malek, Jesper Andersson, and Bradley Schmerl of Special Issue on State-of-the-Art and Research Challenges in Self-Adaptive Systems in the Journal on Systems and Software, 85(12), JSS
- 2010 - Co-editor with Rogerio de Lemos, Sam Malek and Jesper Andersson of the Springer Lecture Notes in Computer Science volume on Self-Organizing Architectures (vol. 6090)
- Co-editor with Marie-Pierre Gleizes. Springer Lecture Notes in Computer Science volume 6788, Agent-Oriented Software Engineering XI
- 2009 - Editor with Lin Uhrmacher of the book Multi-Agent Systems: Simulation and Applications published by Taylor and Francis
- Guest editor with H.V.D. Parunak and Onn Shehory of Special Issue on Future of Software Engineering and Multiagent Systems in International Journal on Agent-Oriented Software Engineering, 3(4), 2009

- 2008 - Guest editor with Andrea Omicini of Special Issue on Engineering Environments for Multiagent Systems in International Journal on Multiagent and Grid Systems, MAGS, 5(1), 2009
- 2008 - Co-editor with Sven Brueckner and Yves Demazeau of the Springer Lecture Notes in Computer Science volume on Engineering Environment-Mediated Multiagent Systems (vol. 5049)
- 2004-2007 - Guest editor of Special Issue on Multiagent Systems and Software Architecture in International Journal on Agent-Oriented Software Engineering, 2(1)
- 2004-2007 Co-editor with H.V.D. Parunak and F. Michel, Springer Series Lecture Notes in Computer Science on Environments for Multiagent Systems (vol. 3374, 3830, 4389)
- 2006 Guest editor with H.V.D. Parunak of the Special Issue on Environments in Multiagent Systems in Journal on Autonomous Agents and Multiagent Systems, JAAMAS, 14(1)

Full List of Publications

International reviewed journals

- IJ.24 D. Gil de la Iglesia and D. Weyns, MAPE-K Formal Templates to Rigorously Design Behaviors for Self-Adaptive Systems, ACM Transactions on Autonomous and Adaptive Systems (TAAS), accepted.
- IJ.23 D. Gil de la Iglesia, J. Felipe Calderon, D. Weyns, M. Milrad, M. Nussbaum, A Self-Adaptive Multi-Agent System Approach for Collaborative Mobile Learning, IEEE Transactions on Learning Technologies, accepted.
- IJ.22 M. Galster, D. Weyns, D. Tofan, B. Michalik, and P. Avgeriou, Variability in Software Systems - A Systematic Literature Review, IEEE Transactions on Software Engineering (TSE) 40(3), 2014
- IJ.21 M. Galster, P. Avgeriou, T. Männistö, D. Weyns: Variability in software architecture - State of the art. Journal of Systems and Software 91: 1-2 (2014)
- IJ.20 R. Haesevoets, D. Weyns, T. Holvoet, Architecture-Centric Support for Dynamic Service Collaborations, ACM Transactions on Software Engineering and Methodology (TOSEM), 23(1), 2013
- IJ.19 D. Weyns, S. Malek, J. Andersson, FORMS: Unifying Reference Model for Formal Specification of Distributed Self-Adaptive Systems, ACM Transactions on Autonomous and Adaptive Systems (TAAS), 7(1), 2012
- IJ.18 R. Claes, T. Holvoet, D. Weyns, A Decentralized Approach for Anticipatory Vehicle Routing using Delegate Multi-Agent Systems, IEEE Transactions on Intelligent Transportation Systems, 12 (2), pp. 364-373, 2011
- IJ.17 N. Boucke, D. Weyns, T. Holvoet, Composition of Architectural Models: Empirical Analysis and Language Support, Journal of Systems and Software (JSS), 83(11), pp. 2108-2127, 2010
- IJ.16 D. Weyns, M. Georgeff, Self-Adaption using Multi-Agent Systems, IEEE Software, 27(1), pp. 86-91, 2010
- IJ.15 D. Weyns, N. Boucke, and T. Holvoet, A Field-Based Versus a Protocol-Based Approach for Adaptive Task Assignment, Journal on Autonomous Agents and Multi-Agent Systems, 17(2), pp. 288-319, 2008
- IJ.14 D. Weyns, A. Omicini, and J. Odell, Environment as a first-class abstraction in multiagent systems, International Journal on Autonomous Agents and Multi-Agent Systems 14 (1), pp. 5-30, February, 2007
- IJ.13 D. Weyns, M. Schumacher, A. Ricci, M. Viroli, and T. Holvoet, Environments in multiagent systems, The Knowledge Engineering Review 20 (2), pp. 127-141, June, 2005
- IJ.12 D. Weyns, and T. Holvoet, A formal model for situated multi-agent systems, Fundamenta Informaticae 63 (2-3), pp. 125-158, November, 2004

- IJ.11 D. Weyns, E. Steegmans, and T. Holvoet, Towards active perception in situated multi-agent systems, *Applied Artificial Intelligence* 18 (9-10), pp. 867-883, October, 2004
- IJ.10 D. Weyns, A. Helleboogh, R. Haesevoets, T. Holvoet, W. Joosen, The MACODO Middleware for Context-Driven Dynamic Agent Organizations, *ACM Transaction on Adaptive and Autonomous Systems*, TAAS, 5(1), 2010
- IJ.09 D. Weyns, A. Helleboogh, R. Haesevoets, The MACODO Organization Model for Context-driven Dynamic Agent Organizations, *ACM Transaction on Adaptive and Autonomous Systems*, TAAS, 5(4), 2010
- IJ.08 D. Weyns, H.V.D. Parunak, O. Shehory, The Future of Software Engineering and Multiagent Systems, *International Journal on Agent Oriented Software Engineering*, 3(4), pp. 369-377, 2009
- IJ.07 D. Weyns, A. Helleboogh, T. Holvoet, How to Get Multiagent Systems Accepted in Industry? *International Journal on Agent Oriented Software Engineering*, 3(4), pp. 383-390, 2009
- IJ.06 D. Weyns and T. Holvoet, Mediating Agents' Activities in Situated Multiagent Systems, *CPE Special Issue on Coordination in Pervasive Environments, Ubiquitous Computing and Communications Journal*, June 2008
- IJ.05 D. Weyns and T. Holvoet, Architectural Design of a Situated Multiagent System for Controlling Automatic Guided Vehicles, *Special Issue on Multiagent Systems and Software Architecture, International Journal on Agent Oriented Software Engineering*, 2(1), pp. 90-128, 2008
- IJ.04 D. Weyns, A. Helleboogh, T. Holvoet, M. Schumacher, The Environment in Multiagent System: A Middleware Perspective, *Special Issue on Engineering Environments for Multiagent Systems, International Journal on Multiagent and Grid Systems*, 5(1), pp. 93-108, 2009
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