Papers per Year
Andrea Omicini
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Below, publications by Mirko Viroli between 2000 and 2015, ordered by year of publication.

2015

Franco Zambonelli, Andrea Omicini, Bernhard Anzengruber, Gabriella Castelli, Francesco L. DeAngelis, Giovanna Di Marzo Serugendo, Simon Dobson, Jose Luis Fernandez-Marquez, Alois Ferscha, Marco Mamei, Stefano Mariani, Ambra Molesini, Sara Montagna, Jussi Nieminen, Danilo Pianini, Matteo Risoldi, Alberto Rosi, Graeme Stevenson, Mirko Viroli, Juan Ye

*Developing Pervasive Multi-Agent Systems with Nature-Inspired Coordination*

Pervasive and Mobile Computing 17-B, February 2015

Ferruccio Damiani, Mirko Viroli, Danilo Pianini, Jacob Beal

*Code Mobility Meets Self-organisation: A Higher-Order Calculus of Computational Fields*

Formal Techniques for Distributed Objects, Components, and Systems, Lecture Notes in Computer Science 9039, 2015

Jacob Beal, Mirko Viroli

*Space-Time Programming*

Philosophical Transactions of the Royal Society of London A: Mathematical, Physical and Engineering Sciences 373(2046), 2015

Sara Montagna, Mirko Viroli, Andrea Roli

*A framework supporting multi-compartment stochastic simulation and parameter optimisation for investigating biological system development*


Danilo Pianini, Mirko Viroli, Jacob Beal

*Protelis: Practical Aggregate Programming*

Proceedings of the 30th Annual {ACM} Symposium on Applied Computing, Salamanca, Spain, April 13-17, 2015, 2015

2014

Enrico Oliva, Peter McBurney, Andrea Omicini, Mirko Viroli

*Argumentation and Artifacts for Negotiation Support*


Mirko Viroli, Ferruccio Damiani

*A Calculus of Self-stabilising Computational Fields*

Coordination Models and Languages, Lecture Notes in Computer Science 8459, 2014

Jose Luis Fernandez-Marquez, Mirko Viroli, Gabriella Castelli

*Best ACM SAC Articles on Coordination and Self-Adaptation*

ACM Trans. Auton. Adapt. Syst. 9(2), jul 2014

Mirko Viroli
Towards a Unified Model of Spatial Computing
7th International Spatial Computing Workshop (SCW 2014), 6 May 2014

Danilo Pianini, Mirko Viroli, Franco Zambonelli, Alois Ferscha
HPC from a self-organisation perspective: The case of crowd steering at the urban scale
High Performance Computing Simulation (HPCS), 2014 International Conference on, July 2014

Jacob Beal, Mirko Viroli
Building Blocks for Aggregate Programming of Self-Organising Applications
Eighth [IEEE] International Conference on Self-Adaptive and Self-Organizing Systems Workshops, 2014

2013

Jose Luis Fernandez-Marquez, Giovanna Di Marzo Serugendo, Sara Montagna, Mirko Viroli, Josep Lluis Arcos
Description and composition of bio-inspired design patterns: a complete overview
Natural Computing 12(1), 2013

Sara Montagna, Mirko Viroli, Jose Luis Fernandez-Marquez, Giovanna Di Marzo Serugendo, Franco Zambonelli
Injecting Self-organisation into Pervasive Service Ecosystems
Mobile Networks and Applications 18(3), 2013

Graeme Stevenson, Jose Luis Fernandez-Marquez, Sara Montagna, Alberto Rosi, Juan Ye, Akla Tchao, Simon Dobson, Giovanna Di Marzo Serugendo, Mirko Viroli
Self-Organising Semantic Resource Discovery for Pervasive Systems
Self-Adaptive and Self-Organizing Systems Workshops (SASOW), apr 2013

Ambra Molesini, Matteo Casadei, Andrea Omicini, Mirko Viroli
Simulation in Agent-Oriented Software Engineering: The SODA Case Study
Science of Computer Programming 78(6), June 2013

Mirko Viroli, Jacob Beal, Kyle Usbeck
Operational Semantics of Proto
Science of Computer Programming 78(6), June 2013

Ambra Molesini, Andrea Omicini, Mirko Viroli, Franco Zambonelli
Engineering Pervasive Multiagent Systems in SAPERE
1st International Workshop "Engineering Multi-Agent Systems" (EMAS 2013), 6-7 May 2013

Graeme Stevenson, Juan Ye, Simon Dobson, Danilo Pianini, Sara Montagna, Mirko Viroli
Combining self-organisation, context-awareness and semantic reasoning: the case of resource discovery in opportunistic networks

Sara Montagna, Mirko Viroli
Composing Gradients for a Context-Aware Navigation of Users in a Smart-City
6th International Spatial Computing Workshop (SCW 2013), 6 May 2013

Elena Nardini, Andrea Omicini, Mirko Viroli
Semantic Tuple Centres
Science of Computer Programming 78(5), May 2013

Danilo Pianini, Sara Montagna, Mirko Viroli
Chemical-oriented Simulation of Computational Systems with Alchemist
Journal of Simulation, 2013

Matteo Casadei, Mirko Viroli
**Toward Approximate Stochastic Model Checking of Computational Fields for Pervasive Computing Systems**
Self-Adaptive and Self-Organizing Systems Workshops (SASOW), apr 2013

Graeme Stevenson, Juan Ye, Simon Dobson, Mirko Viroli, Sara Montagna
**Self-Organising Semantic Resource Discovery for Pervasive Systems**
Self-Adaptive and Self-Organizing Systems Workshops (SASOW), apr 2013

Mirko Viroli
**Engineering Confluent Computational Fields: from Functions to Rewrite Rules**
6th International Spatial Computing Workshop (SCW 2013), 6 May 2013

Ambra Molesini, Andrea Omicini, Mirko Viroli, Franco Zambonelli
**Engineering Pervasive Multiagent Systems in SAPERE**
Engineering Multi-Agent Systems, Lecture Notes in Computer Science 8245, December 2013

Jacob Beal, Stefan Dulman, Kyle Usbeck, Mirko Viroli, Nikolaus Correll
**Organizing the Aggregate: Languages for Spatial Computing**
Formal and Practical Aspects of Domain-Specific Languages: Recent Developments, 2013

Mirko Viroli, Ferruccio Damiani, Jacob Beal
**A calculus of computation fields**
Advances in Service-Oriented and Cloud Computing, Communications in Computer and Information Science 393, 2013

Mirko Viroli
**On competitive self-composition in pervasive services**
Science of Computer Programming 78(5), May 2013

---

### 2012

Ronaldo Menezes, Andrea Omicini, Mirko Viroli
**Dynamic Composition of Coordination Abstractions for Pervasive Systems: The Case of LogOp**

Mirko Viroli, Danilo Pianini, Sara Montagna, Graeme Stevenson
**Pervasive Ecosystems: a Coordination Model based on Semantic Chemistry**

Sara Montagna, Danilo Pianini, Mirko Viroli
**A Model for Drosophila Melanogaster Development from a Single Cell to Stripe Pattern Formation**

Mirko Viroli, Franco Zambonelli, Graeme Stevenson, Simon Dobson
**From SOA to Pervasive Service Ecosystems: an approach based on Semantic Web technologies**
Adaptive Web Services for Modular and Reusable Software Development: Tactics and Solution, 2012

Mirko Viroli, Danilo Pianini, Jacob Beal
**Linda in space-time: an adaptive coordination model for mobile ad-hoc environments**
Coordination Models and Languages, LNCS 7274, jun 2012

Sara Montagna, Danilo Pianini, Mirko Viroli
**Gradient-based Self-organisation Patterns of Anticipative Adaptation**

Matteo Casadei, Mirko Viroli
**A Framework to Specify and Verify Computational Fields for Pervasive Computing Systems**
Proceedings of the 13th Workshop on Objects and Agents, 12 September 2012
Mirko Viroli, Graeme Stevenson
On the Space-time Situation of Pervasive Service Ecosystems
Workshop on Spatial Computing, jun 2012

Graeme Stevenson, Mirko Viroli, Juan Ye, Sara Montagna, Simon Dobson
Self-organising Semantic Resource Discovery for Pervasive Systems
1st International Workshop on Adaptive Service Ecosystems: Natural and Socially Inspired Solutions (ASENSIS 2012), 10 September 2012

Sara Montagna, Mirko Viroli, Danilo Pianini, Jose Luis Fernandez-Marquez
Towards a comprehensive approach to spontaneous self-composition in pervasive ecosystems
Proceedings of the 13th Workshop on Objects and Agents, 12 September 2012

Matteo Casadei, Mirko Viroli
Toward Approximate Stochastic Model Checking of Computational Fields for Pervasive Computing Systems
1st International Workshop on Adaptive Service Ecosystems: Natural and Socially Inspired Solutions (ASENSIS 2012), 10 September 2012

Sara Montagna, Mirko Viroli
A Computational Framework for Multilevel Morphologies
Morphogenetic Engineering, Understanding Complex Systems, 2012

Ferruccio Damiani, Paola Giannini, Alessandro Ricci, Mirko Viroli
Standard Type Soundness for Agents and Artifacts
Scientific Annals of Computer Science 22(2), 2012

2011

Alessandro Ricci, Mirko Viroli, Giulio Piancastelli
simpA: An Agent-oriented Approach for Programming Concurrent Applications on top of Java
Science of Computer Programming 76(1), January 2011

Mirko Viroli, Elena Nardini, Gabriella Castelli, Marco Mamei, Franco Zambonelli
Coordinating Spatially-Situated Pervasive Service Ecosystems
WOA 2011 - XII Workshop Nazionale "Dagli Oggetti agli Agenti", CEUR Workshop Proceedings 741, 4-6 July 2011

Elena Nardini, Andrea Omicini, Mirko Viroli
Description Spaces with Fuzziness
26th Annual ACM Symposium on Applied Computing (SAC 2011), 21-25 March 2011

Andrea Omicini, Mirko Viroli
Coordination Models and Languages: From Parallel Computing To Self-Organisation
The Knowledge Engineering Review 26(1), March 2011

Mirko Viroli, Matteo Casadei, Sara Montagna, Franco Zambonelli
Spatial Coordination of Pervasive Services through Chemical-inspired Tuple Spaces
ACM Transactions on Autonomous and Adaptive Systems 6(2), June 2011

Mirko Viroli, Jacob Beal, Matteo Casadei
Core Operational Semantics of {P}roto

Peter McBurney, Simon Parsons, Mirko Viroli
A Quarter-century of The Knowledge Engineering Review: Introduction to the Special Issue
The Knowledge Engineering Review 26(1), March 2011
Elena Nardini, Andrea Omicini, Mirko Viroli, Michael Ignaz Schumacher
Coordinating e-Health Systems with TuCSoN Semantic Tuple Centres
Applied Computer Review 11(2), Spring 2011

Jose Luis Fernandez-Marquez, Josep Lluis Arcos, Giovanna Di Marzo Serugendo, Mirko Viroli, Sara Montagna
Description and Composition of Bio-Inspired Design Patterns: the Gradient Case

Sara Montagna, Mirko Viroli, Matteo Risoldi, Danilo Pianini, Giovanna Di Marzo Serugendo
Self-organising Pervasive Ecosystems: A Crowd Evacuation Example

Danilo Pianini, Mirko Viroli, Sara Montagna
A Simulation Framework for Pervasive Services Ecosystems
WOA 2011 - XII Workshop Nazionale "Dagli Oggetti agli Agenti", CEUR Workshop Proceedings 741, 4-6 July 2011

Danilo Pianini, Sara Montagna, Mirko Viroli
A Chemical Inspired Simulation Framework for Pervasive Services Ecosystems

Mirko Viroli, Elena Nardini, Gabriella Castelli, Marco Mamei, Franco Zambonelli
Towards a Coordination Approach to Adaptive Pervasive Service Ecosystems

Matteo Casadei, Marco Mamei, Cynthia Villalba, Mirko Viroli, Franco Zambonelli
Middleware Infrastructures for Self-organising Pervasive Computing Systems

Mirko Viroli, Elena Nardini, Gabriella Castelli, Marco Mamei, Franco Zambonelli
A Coordination Approach to Adaptive Pervasive Service Ecosystems
2011 5th IEEE Conference on Self-Adaptive and Self-Organizing Systems Workshops (SASOW 2011), 7 October 2011

Franco Zambonelli, Gabriella Castelli, Laura Ferrari, Marco Mamei, Alberto Rosi, Giovanna Di Marzo Serugendo, Matteo Risoldi, Akla-Esso Tchao, Simon Dobson, Graeme Stevenson, Yuan Ye, Elena Nardini, Andrea Omicini, Sara Montagna, Mirko Viroli, Alois Perscha, Sascha Maschek, Bernhard Wally
Self-aware Pervasive Service Ecosystems
Proceedings of the 2nd European Future Technologies Conference and Exhibition 2011 (FET 11), Procedia Computer Science 7, 4-6 May 2011

Alessandro Ricci, Michele Piunti, Mirko Viroli
Environment Programming in Multi-Agent Systems – An Artifact-Based Perspective
Autonomous Agents and Multi-Agent Systems 23(2), September 2011

Carlos Canal, Mirko Viroli
Preface
Science of Computer Programming 76(1), May 2011

Franco Zambonelli, Mirko Viroli
A Survey on Nature-inspired Metaphors for Pervasive Service Ecosystems
International Journal of Pervasive Computing and Communications 7(3), 2011

Ferruccio Damiani, Paola Giannini, Alessandro Ricci, Mirko Viroli
A Calculus of Agents and Artifacts
Communications in Computer and Information Science 50, 2011
2010

Elena Nardini, Mirko Viroli, Emanuele Panzavolta  
Coordination in Open and Dynamic Environments with TuCSoN Semantic Tuple Centres  
25th Annual ACM Symposium on Applied Computing (SAC 2010), 22-26 March 2010

Alessandro Ricci, Mirko Viroli, Michele Piunti  
Formalising the Environment in MAS Programming: A Formal Model for Artifact-Based Environments  
Programming Multi-Agent Systems, LNAI 5919, 2010

Mirko Viroli, Matteo Casadei  
Chemical-Inspired Self-Composition of Competing Services  
25th Annual ACM Symposium on Applied Computing (SAC 2010), 22-26 March 2010

Sara Montagna, Mirko Viroli  
A Framework for Modelling and Simulating Networks of Cells  

Enrico Oliva, Peter McBurney, Andrea Omicini, Mirko Viroli  
Argumentation and Artifacts for Negotiation Support  
International Journal of Artificial Intelligence 4($10), Spring 2010

Danilo Pianini, Sascia Virruso, Ronaldo Menezes, Andrea Omicini, Mirko Viroli  
Self Organization in Coordination Systems using a WordNet-based Ontology  
4th IEEE International Conference on Self-Adaptive and Self-Organizing Systems (SASO 2010), 27 September - 1 October 2010

Mirko Viroli, Matteo Casadei, Elena Nardini, Andrea Omicini  
Towards a Pervasive Infrastructure for Chemical-Inspired Self-organising Services  
Self-Organizing Architectures, Lecture Notes in Computer Science 6090, July 2010

Mirko Viroli, Franco Zambonelli  
A Biochemical Approach to Adaptive Service Ecosystems  
Information Sciences 180(10), 2010

Elena Nardini, Mirko Viroli, Matteo Casadei, Andrea Omicini  
A Self-Organising Infrastructure for Chemical-Semantic Coordination: Experiments in TuCSoN  

Franco Zambonelli, Mirko Viroli  
From Service-Oriented Architectures to Nature-Inspired Pervasive Service Ecosystems  
WOA 2010 -- Dagli oggetti agli agenti. Modelli e tecnologie per sistemi complessi: context-dependent, knowledge-intensive, nature-inspired e self-* , CEUR Workshop Proceedings 621, {5-7-}#esp 2010

2009

Mirko Viroli, Matteo Casadei, Andrea Omicini  
A Framework for Modelling and Implementing Self-Organising Coordination  
24th Annual ACM Symposium on Applied Computing (SAC 2009), 8-12 March 2009

Matteo Casadei, Mirko Viroli  
Using Probabilistic Model Checking and Simulation for Designing Self-Organizing Systems  
24th Annual ACM Symposium on Applied Computing (SAC 2009), March, 8-12 2009
Mirko Viroli, Franco Zambonelli, Matteo Casadei, Sara Montagna
*A Biochemical Metaphor for Developing Eternally Adaptive Service Ecosystems*
24th Annual ACM Symposium on Applied Computing (SAC 2009), March, 8-12 2009

Sara Montagna, Mirko Viroli
*A computational framework for modelling multicellular biochemistry*
2009 IEEE Congress on Evolutionary Computation (CEC 2009), 18-21 May 2009

Alessandro Ricci, Michele Piunti, Mirko Viroli, Andrea Omicini
*Environment Programming in CartAgO*
Multi-Agent Programming II: Languages, Platforms and Applications, Multiagent Systems, Artificial Societies, and Simulated Organizations, June 2009

Ambra Molesini, Andrea Omicini, Mirko Viroli
*Environment in Agent-Oriented Software Engineering Methodologies*
Multiagent and Grid Systems 5(1), 2009

Matteo Casadei, Mirko Viroli
*An Experience on Probabilistic Model Checking and Stochastic Simulation to Design Self-Organizing Systems*
IEEE Congress on Evolutionary Computation, 2009 (CEC 2009), May, 18-21 2009

Enrico Oliva, Mirko Viroli, Andrea Omicini, Peter McBurney
*Argumentation and Artifact for Dialog Support*
Argumentation in Multi-Agent Systems, Lecture Notes in Artificial Intelligence 5384, February 2009

Andrea Omicini, Michele Piunti, Alessandro Ricci, Mirko Viroli
*Agents, Intelligence, and Tools*

Luca Gardelli, Mirko Viroli, Andrea Omicini
*Combining Simulation and Formal Tools for Developing Self-Organizing MAS*

Mirko Viroli, Matteo Casadei
*Biochemical Tuple Spaces for Self-Organising Coordination*
Coordination Languages and Models, Lecture Notes in Computer Science 5521, June 2009

Elena Nardini, Andrea Omicini, Mirko Viroli
*General-Purpose Coordination Abstractions for Managing Interaction in MAS*
The WI-IAT 2009 Workshops Proceedings, 15-18 September 2009

Alessandro Ricci, Michele Piunti, Mirko Viroli
*Externalisation and Internalization: A New Perspective on Agent Modularisation in Multi-Agent Systems Programming*
Proceedings of MALLOw 2009 federated workshops: LAnguages, methodologies and Development tools for multi-agent systemS (LADS 2009), September 2009

Ferruccio Damiani, Paola Giannini, Alessandro Ricci, Mirko Viroli
*FEATHERWEIGHT AGENT LANGUAGE - A Core Calculus for Agents and Artifacts*

Alessandro Ricci, Mirko Viroli, Michele Piunti
*Formalising the Environment in MAS Programming: a Formal Model*
Programming Multi-Agent Systems 7th International Workshop (ProMAS 2009) Revised Selected Papers, Lecture Notes Computer Science 5919, 2009

Matteo Casadei, Mirko Viroli, Luca Gardelli
*On the Collective Sort Problem for Distributed Tuple Spaces*
Science of Computer Programming 74(9), 2009
2008

Alessandro Ricci, Mirko Viroli, Andrea Omicini
The A&A Programming Model and Technology for Developing Agent Environments in MAS
Programming Multi-Agent Systems, Lecture Notes in Computer Science 4908, April 2008

Matteo Casadei, Mirko Viroli, Marco Santarelli
Collective Sort and Emergent Patterns of Tuple Distribution in Grid-Like Networks

Luca Gardelli, Mirko Viroli, Matteo Casadei, Andrea Omicini
Designing Self-Organising Environments with Agents and Artefacts: A Simulation-Driven Approach
International Journal of Agent-Oriented Software Engineering 2(2), 2008

Maurizio Cimadamore, Mirko Viroli
Integrating Java and Prolog through Generic Methods and Type Inference
23th ACM Symposium on Applied Computing (SAC 2008), 16-20 March 2008

Enrico Oliva, Luca Gardelli, Mirko Viroli, Andrea Omicini
Experimenting with Stochastic Prolog as a Simulation Language
23º Convegno Italiano di Logica Computazionale (CILC’08), 10-12 July 2008

Andrea Omicini, Alessandro Ricci, Mirko Viroli
Artifacts in the A&A Meta-Model for Multi-Agent Systems
Autonomous Agents and Multi-Agent Systems 17(3), December 2008

Chieri Saito, Atsushi Igarashi, Mirko Viroli
Lightweight Family Polymorphism

Matteo Casadei, Andrea Omicini, Mirko Viroli
Prototyping A&A ReSpecT in Maude
Electronic Notes in Theoretical Computer Science 194(4), April 2008

Alessandro Ricci, Mirko Viroli, Maurizio Cimadamore
Prototyping Concurrent Systems with Agents and Artefacts: Framework and Core Calculus
Electronic Notes in Theoretical Computer Science 194(4), April 2008

Matteo Casadei, Mirko Viroli
Applying Self-Organizing Coordination to Emergent Tuple Organization in Distributed Networks

Alessandro Ricci, Mirko Viroli, Giulio Piancastelli
simpA: A Simple Agent-Oriented Java Extension for Developing Concurrent Applications

Franco Zambonelli, Mirko Viroli
Architecture and Metaphors for Eternally Adaptive Service Ecosystems

Cynthia Villalba, Alberto Rosi, Mirko Viroli, Franco Zambonelli
Nature-inspired Spatial Metaphors for Pervasive Service Ecosystems
9th Workshop "From Objects to Agents" (WOA 2008) — Evolution of Agent Development: Methodologies, Tools, Platforms and Languages, November 2008

Enrico Oliva, Antonio Natali, Alessandro Ricci, Mirko Viroli
[An Adaptation Logic Framework for Java-based Component Systems](#)
Journal of Universal Computer Science 14(13), 2008

Enrico Oliva, Mirko Viroli, Andrea Omicini
[Arguments and Artifacts for Dispute Resolution](#)
9th Workshop "From Objects to Agents" (WOA 2008) — Evolution of Agent Development: Methodologies, Tools, Platforms and Languages, November 2008

Cynthia Villalba, Alberto Rosi, Mirko Viroli, Franco Zambonelli
[Nature-inspired Spatial Metaphors for Pervasive Service Ecosystems](#)
Workshop on Spatial Computing, oct 2008

Enrico Oliva, Mirko Viroli, Andrea Omicini, Peter McBurney
[Argumentation and Artifact for Dialogue Support](#)
5th International Workshop "Argumentation in Multi-Agent Systems" (ArgMAS 2008), 12 May 2008

Canal Carlos, Pascal Poizat, Mirko Viroli
[Preface](#)

Maurizio Cimadamore, Mirko Viroli
[On the reification of Java wildcards](#)

2007

Andrea Omicini, Alessandro Ricci, Mirko Viroli
[Timed Environment for Web Agents](#)
Web Intelligence and Agent Systems 5(2), August 2007

Luca Gardelli, Mirko Viroli, Andrea Omicini
[Design Patterns for Self-Organising Systems](#)
Multi-Agent Systems and Applications V, Lecture Notes in Computer Science 4696, September 2007

Matteo Casadei, Andrea Omicini, Mirko Viroli
[Prototyping A&A ReSpecT in Maude](#)
6th International Workshop on Foundations of Coordination Languages and Software Architectures (FOCLASA'07), 8 September 2007

Luca Gardelli, Mirko Viroli, Andrea Omicini
[Design Patterns for Self-Organizing Multiagent Systems](#)

Alessandro Ricci, Mirko Viroli, Andrea Omicini
[“Give Agents their Artifacts”: The A&A Approach for Engineering Working Environments in MAS](#)

Alessandro Ricci, Mirko Viroli, Andrea Omicini
[CArtAgO: A Framework for Prototyping Artifact-Based Environments in MAS](#)
Environments for MultiAgent Systems III, Lecture Notes in Computer Science 4389, May-June 2007
Alessandro Ricci, Andrea Omicini, Mirko Viroli, Luca Gardelli, Enrico Oliva
Cognitive Stigmergy: Towards a Framework Based on Agents and Artifacts
Environments for MultiAgent Systems III, Lecture Notes in Computer Science 4389, May 2007

Mirko Viroli, Andrea Omicini, Alessandro Ricci
Infrastructure for RBAC-MAS: An Approach Based on Agent Coordination Contexts

Mirko Viroli, Matteo Casadei, Luca Gardelli
A Self-Organising Solution to the Collective Sort Problem in Distributed Tuple Spaces

Alessandro Ricci, Mirko Viroli, Andrea Omicini
A General Purpose Programming Model & Technology for Developing Working Environments in MAS

Mirko Viroli, Andrea Omicini
ReSpecT Nets: Towards an Analysis Methodology for ReSpecT Specifications
Electronic Notes in Theoretical Computer Science 180(2), June 2007

Matteo Casadei, Luca Gardelli, Mirko Viroli
Simulating Emergent Properties of Coordination in Maude: the Collective Sort Case
Electronic Notes in Theoretical Computer Science 175(2), June 2007

Matteo Casadei, Ronaldo Menezes, Mirko Viroli, Robert Tolksdorff
Using Ant's Brood Sorting to Increase Fault Tolerance in Linda's Tuple Distribution Mechanism
Cooperative Information Agents XI, Lecture Notes in Computer Science 4676, September 2007

Matteo Casadei, Ronaldo Menezes, Robert Tolksdorff, Mirko Viroli
On the Problem of Over-clustering in Tuple-based Coordination Systems

Matteo Casadei, Ronaldo Menezes, Mirko Viroli, Robert Tolksdorff
A Self-organizing Approach to Tuple Distribution in Large-Scale Tuple-Space Systems
Self-Organizing Systems, Lecture Notes in Computer Science 4725, August 2007

Matteo Casadei, Ronaldo Menezes, Mirko Viroli, Robert Tolksdorff
Self-Organized Over-Clustering Avoidance in Tuple-Space Systems

Alessandro Ricci, Mirko Viroli
simpA: An Agent-Oriented Approach for Prototyping Concurrent Applications on Top of Java
5th International Symposium on Principles and Practice of Programming in Java (PPPJ 2007), ACM International Conference Proceeding 272, 5-7 September 2007

Mirko Viroli, Tom Holvoet, Alessandro Ricci, Kurt Schellenthout, Franco Zambonelli
Infrastructures for the Environment of Multiagent Systems
Autonomous Agents and Multi-Agent Systems 14(1), July 2007

Atsushi Igarashi, Mirko Viroli
Variant path types for scalable extensibility
ACM SIGPLAN Notices 42(10), 2007

Mirko Viroli
A core calculus for correlation in orchestration languages
Journal of Logic and Algebraic Programming 70(1), jan 2007

Luca Gardelli, Mirko Viroli, Matteo Casadei, Andrea Omicini
Designing Self-organising MAS Environments: The Collective Sort Case
Environments for MultiAgent Systems III, Lecture Notes in Computer Science 4389, May 2007

Maurizio Cimadamore, Mirko Viroli
A Prolog-oriented extension of Java programming based on generics and annotations
5th international symposium on Principles and practice of programming in Java (PPPJ '07), 2007

Carlos Canal, Mirko Viroli
Preface
Science of Computer Programming 66(3), may 2007

Davide Ancona, Mirko Viroli
Guest Editorial
Journal of Object Technology 6(2), 2007

Canal Carlos, Mirko Viroli
Preface

Mirko Viroli, Enrico Denti, Alessandro Ricci
Engineering a BPEL Orchestration Engine as a Multi-agent System
Science of Computer Programming 66(3), may 2007

2006

Matteo Casadei, Luca Gardelli, Mirko Viroli
Simulating Emergent Properties of Coordination in Maude: the Collective Sort Case
5th International Workshop on Foundations of Coordination Languages and Software Architectures (FOCLASA'06), 31 August 2006

Mirko Viroli, Andrea Omicini
Coordination as a Service
Fundamenta Informaticae 73(4), 2006

Matteo Casadei, Luca Gardelli, Mirko Viroli
A Case of Self-Organising Environment for MAS: the Collective Sort Problem

Alessandro Ricci, Claudio Buda, Nicola Zaghini, Antonio Natali, Mirko Viroli, Andrea Omicini
simpA-WS: An Agent-Oriented Computing Technology for WS-based SOA Applications
From Objects to Agents, CEUR Workshop Proceedings 204, October 2006

Atsushi Igarashi, Mirko Viroli
Variant Parametric Types: A Flexible Subtyping Scheme for Generics
ACM Transactions on Programming Languages and Systems 28(5), September 2006

Alessandro Ricci, Mirko Viroli, Andrea Omicini
CArtAgO: An Infrastructure for Engineering Computational Environments in MAS

Alessandro Ricci, Mirko Viroli, Andrea Omicini
Construenda est CArTAgO: Toward an Infrastructure for Artifacts in MAS
Cybernetics and Systems 2006, 18-21 April 2006

Luca Gardelli, Mirko Viroli, Matteo Casadei
On Engineering Self-Organizing Environments: Stochastic Methods for Dynamic Resource Allocation
3rd International Workshop “Environments for Multi-Agent Systems” (E4MAS 2006), May 8 2006

Enrico Oliva, Mirko Viroli, Andrea Omicini
Minority Game: A Logic-Based Approach in TuCSoN
From Objects to Agents, CEUR Workshop Proceedings 204, October 2006

Antonio Natali, Enrico Oliva, Alessandro Ricci, Mirko Viroli
A Framework for Engineering Interactions in Java-based Component Systems
Electronic Notes in Theoretical Computer Science 154(1), 2006

Mirko Viroli, Alessandro Ricci, Andrea Omicini
Operating Instructions for Intelligent Agent Coordination
The Knowledge Engineering Review 21(1), March 2006

Andrea Omicini, Alessandro Ricci, Mirko Viroli
Agent Coordination Contexts for the Formal Specification and Enactment of Coordination and Security Policies
Science of Computer Programming 63(1), November 2006

Matteo Casadei, Luca Gardelli, Mirko Viroli
Collective Sorting Tuple Spaces

Luca Gardelli, Mirko Viroli, Matteo Casadei
On Engineering Self-Organizing Environments: Stochastic Methods for Dynamic Resource Allocation

Alessandro Ricci, Mirko Viroli, Andrea Omicini
Programming MAS with Artifacts
Programming Multi-Agent Systems, Lecture Notes in Computer Science 3862, March 2006

Andrea Omicini, Alessandro Ricci, Mirko Viroli
The Multidisciplinary Patterns of Interaction from Sciences to Computer Science
Interactive Computation: The New Paradigm, September 2006

Enrico Oliva, Mirko Viroli, Andrea Omicini
Simulation of Minority Game in TuCSoN
From Objects to Agents, CEUR Workshop Proceedings 204, October 2006

Enrico Oliva, Mirko Viroli, Andrea Omicini
Simulating Minority Game with TuCSoN
Industrial Simulation Conference 2006 (ISC 2006), 5-7 June 2006

Andrea Omicini, Alessandro Ricci, Mirko Viroli
Agents Faber: Toward a Theory of Artefacts for MAS
Electronic Notes in Theoretical Computer Science 150(3), 29 May 2006

Alessandro Ricci, Andrea Omicini, Mirko Viroli, Luca Gardelli, Enrico Oliva
Cognitive Stigmergy: A Framework Based on Agents and Artifacts

Alessandro Ricci, Mirko Viroli, Andrea Omicini
Agent Coordination Contexts in a MAS Coordination Infrastructure

Luca Gardelli, Mirko Viroli, Andrea Omicini
On the Role of Simulations in Engineering Self-Organising MAS: The Case of an Intrusion Detection System in TuCSoN
Engineering Self-Organising Systems, Lecture Notes in Computer Science 3910, 2006

Andrea Omicini, Alessandro Ricci, Mirko Viroli
Coordination Artifacts as First-class Abstractions for MAS Engineering: State of the Research
Software Engineering for Multi-Agent Systems IV: Research Issues and Practical Applications, Lecture Notes in Computer Science 3914, April 2006

Luca Gardelli, Mirko Viroli, Andrea Omicini

Exploring the Dynamics of Self-Organising Systems with Stochastic #-Calculus: Detecting Abnormal Behaviour in MAS
Cybernetics and Systems 2006, 18-21 April 2006

Canal Carlos, Mirko Viroli

Preface

Michele Cabano, Enrico Denti, Alessandro Ricci, Mirko Viroli

Designing a BPEL Orchestration Engine based on ReSpecT Tuple Centres
Electronic Notes in Theoretical Computer Science 154(1), 2006

2005

Andrea Omicini, Alessandro Ricci, Mirko Viroli

Time-Aware Coordination in ReSpecT
Coordination Models and Languages, Lecture Notes in Computer Science 3454, April 2005

Alessandro Ricci, Mirko Viroli

Coordination Artifacts: A Unifying Abstraction for Engineering Environment-Mediated Coordination in MAS
Informatica 29(4), November 2005

Mirko Viroli, Giovanni Rimassa

On Access Restriction with Java Wildcards
Journal of Object Technology 4(10), 2005

Danny Weyns, Michael Schumacher, Alessandro Ricci, Mirko Viroli, Tom Holvoet

Environments in Multiagent Systems
The Knowledge Engineering Review 20(2), June 2005

Mirko Viroli, Alessandro Ricci

Agent Interaction Semantics by Timed Operating Instructions
Agent Communication, Lecture Notes in Artificial Intelligence 3396, January 2005

Andrea Omicini, Alessandro Ricci, Mirko Viroli

RBAC for Organisation and Security in an Agent Coordination Infrastructure
Electronic Notes in Theoretical Computer Science 128(5), 3 May 2005

Andrea Omicini, Alessandro Ricci, Mirko Viroli

An Algebraic Approach for Modelling Organisation, Roles and Contexts in MAS
Applicable Algebra in Engineering, Communication and Computing 16(2-3), August 2005

Luca Tummolini, Cristiano Castelfranchi, Alessandro Ricci, Mirko Viroli, Andrea Omicini

“Exhibitionists” and “Voyeurs” do it better: A Shared Environment Approach for Flexible Coordination with Tacit Messages
Environments for Multi-Agent Systems, Lecture Notes in Artificial Intelligence 3374, February 2005

Alessandro Ricci, Mirko Viroli, Andrea Omicini

Environment-Based Coordination Through Coordination Artifacts
Environments for Multi-Agent Systems, Lecture Notes in Artificial Intelligence 3374, February 2005

Mirko Viroli, Andrea Omicini

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Process-Algebraic Approaches for Multi-Agent Systems: An Overview
Applicable Algebra in Engineering, Communication and Computing 16(2-3), August 2005

Mirko Viroli, Alessandro Ricci, Andrea Omicini
An Organisation Infrastructure for Multi-Agent Systems based on Agent Coordination Contexts
4th International Joint Conference "Autonomous Agents & Multi-Agent Systems" (AAMAS 2005), 25-29 July 2005

Alessandro Ricci, Andrea Omicini, Mirko Viroli, Luca Gardelli, Enrico Oliva
Cognitive Stigmergy: A Framework Based on Agents and Artifacts
3rd European Workshop on Multi-Agent Systems (EUMAS 2005), 7-8 December 2005

Luca Gardelli, Mirko Viroli, Andrea Omicini
On the Role of Simulation in the Engineering of Self-Organising Systems: Detecting Abnormal Behaviour in MAS
AI*IA/TABOO Joint Workshop “Dagli oggetti agli agenti: simulazione e analisi formale di sistemi complessi” (WOA 2005), 14-16 November 2005

Mirko Viroli, Andrea Omicini, Alessandro Ricci
An Organisation Infrastructure for Multi-Agent Systems based on Agent Coordination Contexts
AI*IA 2005: Advances in Artificial Intelligence, Lecture Notes in Computer Science 3673, 21-23 September 2005

Luca Gardelli, Mirko Viroli, Andrea Omicini
On the Role of Simulations in Engineering Self-Organizing MAS: the Case of an Intrusion Detection System in TuCSoN
3rd International Workshop “Engineering Self-Organising Applications” (ESOA 2005), 26 July 2005

Alessandro Ricci, Mirko Viroli, Andrea Omicini
Programming MAS with Artifacts
3rd International Workshop “Programming Multi-Agent Systems” (PROMAS 2005), 26 July 2005

Mirko Viroli, Andrea Omicini, Alessandro Ricci
Engineering MAS Environment with Artifacts
2nd International Workshop "Environments for Multi-Agent Systems" (E4MAS 2005), 26 July 2005

2004

Mirko Viroli, Alessandro Ricci, Andrea Omicini
A Semantics for the Interaction of Agents with Coordination Artifacts
Cybernetics and Systems 2004, 13-16 April 2004

Alessandro Ricci, Mirko Viroli, Andrea Omicini
Agent Coordination Context: From Theory to Practice
Cybernetics and Systems 2004, 13-16 April 2004

Ronaldo Menezes, Andrea Omicini, Mirko Viroli
On the Semantics of Coordination Models for Distributed Systems: The LogOp Case Study
Electronic Notes in Theoretical Computer Science 97, 22 July 2004

Andrea Omicini, Alessandro Ricci, Mirko Viroli, Giovanni Rimassa
Integrating Objective & Subjective Coordination in MultiAgent Systems
19th ACM Symposium on Applied Computing (SAC 2004), 14-17 March 2004

Andrea Omicini, Alessandro Ricci, Mirko Viroli, Cristiano Castelfranchi, Luca Tummolini
Coordination Artifacts: Environment-based Coordination for Intelligent Agents
3rd international Joint Conference on Autonomous Agents and Multiagent Systems (AAMAS 2004), 19-23 July 2004

Andrea Omicini, Alessandro Ricci, Mirko Viroli, Cristiano Castelfranchi, Luca Tummolini
A Conceptual Framework for Self-Organising MAS
2004

Mirko Viroli, Andrea Omicini
**A Type-Passing Approach for the Implementation of Parametric Methods in Java**
The Computer Journal 46(3), 2003

Andrea Omicini, Alessandro Ricci, Mirko Viroli
**Formal Specification and Enactment of Security Policies through Agent Coordination Contexts**
Electronic Notes in Theoretical Computer Science 85(3), August 2003

Andrea Omicini, Alessandro Ricci, Giovanni Rimassa, Mirko Viroli
**Integrating Objective & Subjective Coordination in FIPA: A Roadmap to TuCSoN**
AI*IA/TABOO Joint Workshop "Dagli oggetti agli agenti: sistemi intelligenti e computazione pervasiva" (WOA 2003), 10-11 September 2003

Mirko Viroli, Andrea Omicini
**Coordination as a Service: Ontological and Formal Foundation**
Electronic Notes in Theoretical Computer Science 68(3), March 2003

2003

Mirko Viroli
**A Type-Passing Approach for the Implementation of Parametric Methods in Java**
The Computer Journal 46(3), 2003

Andrea Omicini, Alessandro Ricci, Mirko Viroli
**Formal Specification and Enactment of Security Policies through Agent Coordination Contexts**
Electronic Notes in Theoretical Computer Science 85(3), August 2003

2002

Mirko Viroli, Andrea Omicini
**Tuple-based Models in the Observation Framework**
Coordination Models and Languages, Lecture Notes in Computer Science 2315, 2002
Alessandro Ricci, Andrea Omicini, Mirko Viroli
*Extending ReSpecT for Multiple Coordination Flows*
International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'02), 24-27 July 2002

Mirko Viroli, Andrea Omicini, Alessandro Ricci
*Modelling Agents as Observable Sources*
Journal of Universal Computer Science 8(4), April 2002

Mirko Viroli, Andrea Omicini
*An Observation Approach to Semantics of Agents Communication Languages*
Applied Artificial Intelligence: An International Journal 16(9-10), October-December 2002

Ronaldo Menezes, Andrea Omicini, Mirko Viroli
*Have ReSpecT for LogOp*
AI*IA/TABOO Joint Workshop “Dagli oggetti agli agenti: dall'informazione alla conoscenza” (WOA 2002), 18-19 November 2002

Mirko Viroli, Andrea Omicini
*On the Grey-Box Modelling Approach for Autonomous Agents*
8th AIxIA Convention (AIxIA 2002), Workshop “Agenti per la rappresentazione della conoscenza e il ragionamento”, 11 September 2002

Mirko Viroli, Andrea Omicini, Alessandro Ricci
*On the Expressiveness of Event-Based Coordination Media*
International Conference on Parallel and Distributed Processing Techniques and Applications (PDPTA'02), 24-27 July 2002

Mirko Viroli, Andrea Omicini
*Specifying Agent Observable Behaviour*

Mirko Viroli, Andrea Omicini
*Towards an Alternative Semantics for FIPA ACL*
Cybernetics and Systems 2002, 2-5 April 2002

Mirko Viroli, Andrea Omicini
*A Specification Language for Agents Observable Behaviour*
International Conference on Artificial Intelligence (IC-AI'02), 24-27 July 2002

Mirko Viroli, Alessandro Ricci
*Tuple-based Coordination Models in Event-based Scenarios*
22nd International Conference on Distributed Computing Systems, 2002

2001

Mirko Viroli, Gianluca Moro, Andrea Omicini
*On Observation as a Coordination Pattern: An Ontology and a Formal Framework*
16th ACM Symposium on Applied Computing (SAC 2001), 11-14 March 2001

Mirko Viroli, Andrea Omicini
*Multi-Agent Systems as Composition of Observable Systems*
AI*IA/TABOO Joint Workshop “Dagli oggetti agli agenti: tendenze evolutive dei sistemi software” (WOA 2001), 4-5 September 2001

Mirko Viroli, Andrea Omicini
*Multi-Agent Systems as Composition of Observable Systems*
AI*IA Notizie XIV(4), December 2001
<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
</tr>
</tbody>
</table>

Mirko Viroli, Antonio Natali

*Parametric Polymorphism in Java: An Approach to Translation based on Reflective Feature*

ACM SIGPLAN Notices 35(10), 2000