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Andrea Omicini
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Series Articles by Mirko Viroli (2000—2020)

Below, the papers published on series by Mirko Viroli between 2000 and 2020, ordered by year of publication.

### 2019

Roberto Casadei, Danilo Pianini, Mirko Viroli, Antonio Natali

*Self-organising Coordination Regions: a Pattern for Edge Computing*  
Coordination Models and Languages, Proceedings, Lecture Notes in Computer Science 11533, 2019

Stefano Mariani, Roberto Casadei, Fabrizio Fornari, Giancarlo Fortino, Danilo Pianini, Barbara Re, Wilma Russo, Claudio Savaglio, Mirko Viroli, Franco Zambonelli

*Case studies for a new IoT programming paradigm: Fluidware*

Roberto Casadei, Mirko Viroli, Giorgio Audrito, Danilo Pianini, Ferruccio Damiani  

*Aggregate Processes in Field Calculus*  
Coordination Models and Languages, Lecture Notes in Computer Science 11533, 2019

Giorgio Audrito, Sergio Bergamini, Ferruccio Damiani, Mirko Viroli  

*Effective Collective Summarisation of Distributed Data in Mobile Multi-Agent Systems*  
Proceedings of the 18th International Conference on Autonomous Agents and MultiAgent Systems, AAMAS ’19, 2019

Shaukat Ali, Ferruccio Damiani, Schahram Dustdar, Marialuisa Sanseverino, Mirko Viroli, Danny Weyns  

*Big Data from the Cloud to the Edge: The Aggregate Computing Solution*  
Proceedings of the 13th European Conference on Software Architecture - Volume 2, ECSA ‘19, 2019

Giorgio Audrito, Jacob Beal, Ferruccio Damiani, Danilo Pianini, Mirko Viroli  

*The share Operator for Field-Based Coordination*  
Coordination Models and Languages, Proceedings, Lecture Notes in Computer Science 11533, 2019

Giorgio and Viroli Audrito  

*On a Higher-Order Calculus of Computational Fields*  
Formal Techniques for Distributed Objects, Components, and Systems, Lecture Notes in Computer Science 11535, 2019

### 2018

Giorgio Audrito, Jacob Beal, Ferruccio Damiani, Mirko Viroli  

*Space-Time Universality of Field Calculus*  
Coordination Models and Languages, Lecture Notes in Computer Science 10852, 2018

Roberto Casadei, Alessandro Aldini, Mirko Viroli  

*Combining Trust and Aggregate Computing*  
Software Engineering and Formal Methods, Lecture Notes in Computer Science 10729, 2018

Mirko Viroli, Jacob Beal, Ferruccio Damiani, Giorgio Audrito, Roberto Casadei, Danilo Pianini
From Field-Based Coordination to Aggregate Computing
Coordination Models and Languages, Lecture Notes in Computer Science 10852, 2018

Giorgio Audrito, Ferruccio Damiani, Mirko Viroli
Aggregate Graph Statistics
Electronic Proceedings in Theoretical Computer Science, EPTCS 264, 2018

Roberto Casadei, Mirko Viroli
Programming Actor-Based Collective Adaptive Systems
Programming with Actors: State-of-the-Art and Research Perspectives, Lecture Notes in Computer Science 10789, 2018

2017

Mirko Viroli, Roberto Casadei, Danilo Pianini
On Execution Platforms for Large-scale Aggregate Computing

Mirko Viroli, Jacob Beal
Resiliency with Aggregate Computing: State of the Art and Roadmap

Danilo Pianini, Jacob Beal, Mirko Viroli
Improving Gossip Dynamics Through Overlapping Replicates
Coordination Models and Languages, Lecture Notes in Computer Science 9686, 2016

Jacob Beal, Mirko Viroli
Aggregate Programming: From Foundations to Applications

2016

Giancarlo Fortino, Wilma Russo, Claudio Savaglio, Mirko Viroli, MengChu Zhou
Modeling Opportunistic IoT Services in Open IoT Ecosystems
WOA 2017 – “18th Workshop “From Objects to Agents”, CEUR Workshop Proceedings 1867, June 2017

Alessandro Ricci, Mirko Viroli, Andrea Omicini, Stefano Mariani, Angelo Croatti, Danilo Pianini
Spatial Tuples: Augmenting Physical Reality with Tuple Spaces

2015

From Field-Based Coordination to Aggregate Computing
Coordination Models and Languages, Lecture Notes in Computer Science 10852, 2018

Giorgio Audrito, Ferruccio Damiani, Mirko Viroli
Aggregate Graph Statistics
Electronic Proceedings in Theoretical Computer Science, EPTCS 264, 2018
Mirko Viroli, Danilo Pianini, Alessandro Ricci, Pietro Brunetti, Angelo Croatti
Multi-agent Systems Meet Aggregate Programming: Towards a Notion of Aggregate Plan
PRIMA 2015: Principles and Practice of Multi-Agent Systems, Lecture Notes in Computer Science 9387, 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

2014

Mirko Viroli, Ferruccio Damiani
A Calculus of Self-stabilising Computational Fields
Coordination Models and Languages, Lecture Notes in Computer Science 8459, 2014

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

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

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

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

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

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

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

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 Ferscha, 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

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

2010

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

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, 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

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

2009

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

Andrea Omicini, Michele Piunti, Alessandro Ricci, Mirko Viroli
Agents, Intelligence, and Tools
Artificial Intelligence: An International Perspective, Lecture Notes in Computer Science 5640, 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
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

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

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

2008

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

Canal Carlos, Pascal Poizat, Mirko Viroli
Preface

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

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

2007

Canal Carlos, Mirko Viroli
Preface

Luca Gardelli, Mirko Viroli, Matteo Casadei, Andrea Omicini
Designing Self-organising MAS Environments: The Collective Sort Case
Environments for Multi-Agent Systems III, Lecture Notes in Computer Science 4389, May 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, Ronaldo Menezes, Mirko Viroli, Robert Tolksdorf
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
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

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

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

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

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

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

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

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

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

Canal Carlos, Mirko Viroli
Preface

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

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

2005

Mirko Viroli, Alessandro Ricci
Agent Interaction Semantics by Timed Operating Instructions
Agent Communication, Lecture Notes in Artificial Intelligence 3396, January 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

Andrea Omicini, Alessandro Ricci, Mirko Viroli
Time-Aware Coordination in ReSpecT
Coordination Models and Languages, Lecture Notes in Computer Science 3454, April 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

2002

Mirko Viroli, Andrea Omicini
Tuple-based Models in the Observation Framework
Coordination Models and Languages, Lecture Notes in Computer Science 2315, 2002