Book Chapters per Year
Andrea Omicini
2011/01/04 14:23
Book Chapters by Mirko Viroli (2000—2020)

Below, the book chapters published by Mirko Viroli between 2000 and 2020, ordered by year of publication.

2019

Danilo Pianini, Roberto Casadei, Mirko Viroli
*Security in Collective Adaptive Systems: A Roadmap*
[IEEE] 4th International Workshops on Foundations and Applications of Self-Star Systems, FAS-StarW @ SASO/ICCAC 2019, Umea, Sweden, June 16-20, 2019, 2019

Roberto Casadei, Danilo Pianini, Guido Salvaneschi, Mirko Viroli
*On Context-Orientation in Aggregate Programming*
[IEEE] 4th International Workshops on Foundations and Applications of Self-Star Systems, FAS-StarW @ SASO/ICCAC 2019, Umea, Sweden, June 16-20, 2019, 2019

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

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

Danilo Pianini, Simon Dobson, Mirko Viroli
*Self-Stabilising Target Counting in Wireless Sensor Networks Using Euler Integration*

2016

Jacob Beal, Mirko Viroli, Danilo Pianini, Ferruccio Damiani
*Self-adaptation to Device Distribution Changes in Situated Computing Systems*
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

Mirko Viroli, Antonio Bucchiarone, Danilo Pianini, Jacob Beal
**Combining Self-Organisation and Autonomic Computing in CASs with Aggregate-MAPE**

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

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**2015**

Mirko Viroli, Jacob Beal, Ferruccio Damiani, Danilo Pianini
**Efficient Engineering of Complex Self-Organising Systems by Self-Stabilising Fields**

Pietro Brunetti, Angelo Croatti, Alessandro Ricci, Mirko Viroli
**Smart Augmented Fields for Emergency Operations**
Procedia Computer Science, September 2015

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

Alessandro Ricci, Angelo Croatti, Pietro Brunetti, Mirko Viroli
**Programming Mirror-Worlds: An Agent-Oriented Programming Perspective**
Engineering Multi-Agent Systems (EMAS 2015), 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

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**2014**

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

Enrico Oliva, Peter McBurney, Andrea Omicini, Mirko Viroli
**Argumentation and Artifacts for Negotiation Support**
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

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

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

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

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

2011

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

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

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

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, 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 in Computer Science 5919, 2009

Andrea Omicini, Michele Piunti, Alessandro Ricci, Mirko Viroli
*A Agents, Intelligence, and Tools*
Artificial Intelligence: An International Perspective, Lecture Notes in Computer Science 5640, 2009

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

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

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
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

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

Canal Carlos, Mirko Viroli
Preface

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
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

2004

2003

2002

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

2001