Message from General Chair ...........................................................................................................................................xii
Message from Conference Co-organizers ......................................................................................................................xiii
Organizing Committee .......................................................................................................................................................xiv
Steering Committee ...........................................................................................................................................................xv
Program Committee ...........................................................................................................................................................xvi

ACEC Track
ACEC Track Report ............................................................................................................................................................1
   Federico Bergenti, Giacomo Cabri, M. Brian Blake, and Usman Wajid
Collective Awareness for Human-ICT Collaboration in Smart Cities .................................................................3
   Nicola Bicocchi, Alket Cecaj, Damiano Fontana, Marco Mamei, Andrea Sassi,
   and Franco Zambonelli
Agent Behaviour Monitoring in Virtual Organizations .........................................................................................9
   Mahdieh Shadi, Hamideh Afsarmanesh, and Mehdi Dastani
Decentralized Resource Coordination across Service Workflows in a Cloud Environment ...................................15
   Yi Wei and M. Brian Blake
Modeling Elasticity Trade-Offs in Adaptive Mixed Systems ..............................................................................21
   Muhammad Z.C. Candra, Hong-Linh Truong, and Schahram Dustdar
QoS-aware Automatic Web Service Composition based on Cooperative Agents ...............................................27
   Zaki Brahmi
A Discovery Service for Automatic Composition of Web Services Oriented-Agent .................................................33
   Abdellah Kouider El Ouahed, Mohamed Erradi, and Hamid Azzoune
Simulation Based Design for Adaptive Multi-agent Systems: Extension to the ADELFE Methdology .................................................................36
              Wafa Mefteh, Frédéric Migeon, Marie-Pierre Gleizes, and Faiez Gargouri
              Wafa Mefteh, Frédéric Migeon, Marie-Pierre Gleizes, and Faiez Gargouri

AROSA Track: Enabling Communication Technologies for Reconfigurable Distributed Systems

AROSA Track Report .................................................................................................................................42
              Khalil Drira, Slim Kallel, and Ismael Bouassida Rodriguez
A Flexible Wireless Body Sensor Network System for Health Monitoring .................................................44
              Ahmed Harbouche, Mohammed Erradi, and Abdellatif Kobbane
Mobility Management in the HIP-based M2M Overlay Network ..................................................................50
              Amine Dhraief, Mohamed Amine Ghorbali, Tarek Bouali, and Abdelfettah Belghith
A Delayed Checkpoint Approach for Communication-Induced Checkpointing in Autonomic Computing ........................................................................56
              Alberto Calixto Simón, Saul E. Pomares Hernandez, and Jose Roberto Perez Cruz

AROSA Track: Enabling Modeling Technologies for Reconfigurable Distributed Systems

Is Self-Expression Useful? Evaluation by a Case Study ..............................................................................62
              Mariachiara Puviani, Carlo Pinciroli, Giacomo Cabri, Letizia Leonardi, and Franco Zambonelli
Towards an Aspect Oriented Language Compliant with Real Time Constraints ..............................................68
              Wafa Gabsi, Rahma Bouaziz, and Bechir Zalila
Graph-Based Formalism for Machine-to-Machine Self-Managed Communications ........................................74
              Cédric Eichler, Ghada Gharbi, Nawal Guermouche, Thierry Monteil, and Patricia Stolf
A Decentralized Mediation-as-a-Service Architecture for Service Composition .........................................80
              Michael Mrissa, Mohamed Sellami, Pierre De Vettor, Djamal Benslimane, and Bruno Defude
AROSA Track: Enabling Development Technologies for Implementing Reconfigurable Distributed Systems
Towards Context-Aware Deployment and Reconfiguration ..........................................................86
Amir Hammami, Thierry Villemur, and Tom Guerout
Developing Adapters for Structural Adaptation of Component-Based Applications ...........................92
Imen Ben Lahmar and Djamel Belaïd
Fault Tolerance for Distributed Real Time Dynamically Reconfigurable Systems from Modeling to Implementation ..............................................................98
Wafa Gabsi and Bechir Zalila
From Event-B Specifications to Programs for Distributed Algorithms ...........................................104
Mohamed Tounsi, Mohamed Mosbah, and Dominique Méry
A Privacy Manager for Collaborative Working Environments ......................................................110
David S. Allison, Miriam A.M. Capretz, and Said Tazi

CAGing Track
CAGing Track Report ..................................................................................................................117
Patricia Stolf and Thierry Monteil
Autonomic Energy-Aware Tasks Scheduling .............................................................................119
Tom Guérout and Mahdi Ben Alaya
Ahmed Jemal and Riadh Ben Halima

CDCGM Track
CDCGM Track Report ................................................................................................................131
Rao Mikkilineni and Giovanni Morana
Scalable and Configurable Monitoring System for Cloud Environments .......................................134
A. Di Stefano, G. Morana, and D. Zito
Self-Managed Micro-containers for Service-Based Applications in the Cloud ............................140
Mohamed Mohamed, Djamel Belaïd, and Samir Tata
Kaquadai: A Dependable Web Infrastructure Made Out of Existing Components ..........................146
Rosario Giunta, Fabrizio Messina, Giuseppe Pappalardo, and Emiliano Tramontana
Cost/Performance Evaluation for Cloud Applications Using Simulation ....................................152
Massimiliano Rak, Antonio Cuomo, and Umberto Villano
A Data Management in a Private Cloud Storage Environment Utilizing High Performance Distributed File Systems .............................................................................158
Tiago S. Soares, M.A.R. Dantas, Douglas D.J. de Macedo, and Michael A. Bauer
CKDD Track

CKDD Track Report ..........................................................164

Ilias K. Savvas and M-Tahar Kechadi

Privacy-Preserving Collaborative Filtering on Overlapped Ratings ........................................166

Burak Memis and Ibrahim Yakut

Weighted Features Classification with Pairwise Comparisons, Support Vector Machines and Feature Domain Overlapping ...............................................................172

Mohammad Hadi Soudkhah and Ryszard Janicki

Platform for General-Purpose Distributed Data-Mining on Large Dynamic Graphs ..........................................................178

Matthias Steinbauer and Gabriele Kotsis

COPECH Track

COPECH Track Report ..........................................................184

Michele Angelaccio and Berta Buttarazzi

Application of a Wireless Sensor Network Technology Based on GPS for Structural Health Monitoring ..........................................................186

Michela Basili, Berta Buttarazzi, and Kenji Oguni

Application of Radio Frequency Identification for Museum Environment ........................................190

Romeo Giuliano, Franco Mazzenga, Marco Petracca, and Francesco Vatalaro

Using Geo-business Intelligence and Social Integration for Smart Tourism Cultural Heritage Platforms ..........................................................196

Michele Angelaccio, Alessandra Basili, and Berta Buttarazzi

CPS Track

CPS Track Report ..........................................................200

Zhangbing Zhou, Walid Gaaloul, and Jianwei Niu

A High-Level Service Composition Model for Building Applications on Sensor Networks ..........................................................202

Zahra Movahedi and Bruno Defude

CSP Track

CSP Track Report ..........................................................208

Redouane Lbath

Towards a Full Specification and Use of Overlap Relationships between Work Products in MDE Software Processes ..........................................................209

Ibrahima Fall, Reda Bendraou, Marie-Pierre Gervais, and Xavier Blanc
A Negotiation Based Approach for Satisfying the Actor Requirements in Web Services Composition ..........................................................218
Yassine Jamoussi and Asma Kerkeni

A Causal Graph Based Method to Evaluate e-Collaboration Scenarios ..........................................................225
Raoudha Chebil, Wided Lejouad Chaari, Stefano A. Cerri, and Khaled Ghedira

An Engineering Process for Security Patterns Application in Component Based Models ..........................................................231
Rahma Bouaziz, Slim Kallel, and Bernard Coulette

An Agent-Based Model for Trust Management in Electronic Collaboration ..........................................................237
Raoudha Kobbi and Wided Lejouad Chaari

CT2CM Track

CT2CM Track Report ..........................................................................................................................................................243
Narjès Bellamine Ben Saoud, François Charoy, Chihab Hanachi, and Serge Stinckwich

Coupling Case Based Reasoning and Process Mining for a Web Based Crisis Management Decision Support System .........................................................................................................................................................245
Sameh Triki, Narjès Bellamine Ben Saoud, Julie Dugdale, and Chihab Hanachi

Intelligent Tutoring Systems and Serious Game for Crisis Management: A Multi-agents Integration Architecture ........................................................................................................................................................................................................................................253
M'hammed Ali Oulhaci, Erwan Tranvouez, Bernard Espinasse, and Sebastien Fournier

FVSBS Track

FVSBS Track Report ..........................................................................................................................................................259

Organizing Capabilities Using Formal Concept Analysis .........................................................................................................................260
Wassim Derguech, Souleiman Hasan, Sami Bhiri, and Edward Curry

A Model-Driven Engineering Approach for the Formal Verification of Composite Web Services ........................................................................................................................................................................................................................................266
Raoudha Maraouï, Eric Cariou, and Bechir Ayeb

WSCLT: A Tool for WS-BPEL Compositions Load Testing .........................................................................................................................272
Afef Jmal Maâlej, Manel Hamza, and Moez Krichen

Checking Non-functional Properties of UML2.0 Components Assembly ..................................................................................................278
Bhiri Mohamed Tahar, Sakka Rouis Taoufik, and Kmimech Mourad

Formal Modeling and Evaluation of Service-Based Business Process Elasticity in the Cloud ........................................................................................................................................................................................................................................284
Mourad Amziani, Tarek Melliti, and Samir Tata
Application of Equivalence Checking in a Loan Origination Process in Banking Industry .......................................................... 292

Antonella Santone, Valentina Intilangelo, and Domenico Raucci

MADYNE Track

MADYNE Track Report .......................................................................................................................... 298

Said Tazi and Nawal Guermouche

Surveying Collaborative and Content Management Platforms for Enterprise ........................................... 299

Salsabil Dhouib and Riadh Ben Halima

Towards Adopting Dynamic Manufacturing Networks for Future Manufacturing: Benefits and Risks of the IMAGINE DMN End-to-End Management Methodology ......................................................................................... 305

Ourania Markaki, Dimitrios Panopoulos, Panagiotis Kokkinakos, Sotirios Koussouris, and Dimitrios Askounis

PROMASC Track

PROMASC Track Report .......................................................................................................................... 311

Riad Ben Halima, Hatem Hadj Kacem, and Wajdi Louati

Knowledge as a Service Framework for Disaster Data Management .......................................................... 313

Katarina Grolinger, Miriam A.M. Capretz, Emna Mezghani, and Ernesto Exposito

Exact Adaptive Virtual Network Embedding in Cloud Environments ...................................................... 319

Ines Houidi and Djamal Zeghlache

A Decision Method for Business Process Outsourcing Based on Enterprise Context ........................................... 324

Mouna Rekik, Khouloud Boukadi, and Hanane Ben Abdallah

An Approach for Modeling and Formalizing SOA Design Patterns .......................................................... 330

Imen Tounsi, Mohamed Hadj Kacem, and Ahmed Hadj Kacem

A Comparative Study on Game Theoretic Approaches for Resource Allocation in Cloud Computing Architectures ......................................................................................................................... 336

Maha Jebalia, Asma Ben Letaifa, Mohamed Hamdi, and Sami Tabbane

Toward a Cloud-Ready Dynamic Load Balancer Based on the Apache Web Server .................................................. 342

Steffen Heinzi and Christoph Metz

VSC Track

VSC Track Report ................................................................................................................................. 346

Andrea Calvagna and Emiliano Tramontana

Combinatorial Validation Testing of Java Card Byte Code Verifiers ......................................................... 347

Andrea Calvagna and Emiliano Tramontana
Towards Proved Distributed Algorithms through Refinement, Composition and Local Computations .................................................................................................................................353
  Vincent Filou, Mohamed Mosbeh, and Mohamed Tounsi

Detecting Attacks on Java Cards by Fingerprinting Applets .................................................................................................................................359
  Giovanni Morana, Emiliano Tramontana, and Daniele Zito

Towards the Formal Performance Analysis of Wireless Sensor Networks ..................................................365
  Maissa Elleuch, Osman Hasan, Sofiène Tahar, and Mohamed Abid

On Pairwise Comparisons Based Internal and External Measures for Software Evaluation ..................................................371
  Agnieszka D. Bogobowicz and Ryszard Janicki

Test Isolation Policy for Safe Runtime Validation of Evolvable Software Systems ........................................377
  Mariam Lahami and Moez Krichen

Author Index .................................................................................................................................................383