

Domenico Talia

Personal Data

Degree: Laurea Degree in Physics, University of Calabria, Italy
Date and Place of Birth: 2 January 1960, Sant'Agata del Bianco, RC, Italy
Current Position: Full Professor of Computer Engineering at University of Calabria
Home: Via Atene, 24, 87036 Rende, CS, Italy
phone: +39 0984 401932
email: taliad@acm.org

Work: DIMES, University of Calabria
Via P. Bucci, 41c, 87036 Rende, CS, Italy
phone: +39 0984 494726
fax: +39 0984 494713
email: talia@dimes.unical.it
web: si.dimes.unical.it/~talia

Bibliometrics

From <https://scholar.google.it/citations?user=ORMjJHMAAAAJ&hl=it&oi=ao>

Citations	7713
Cites/Paper	19.2
h-Index	43
i10-Index	141

Research Interests

Big Data analysis, Data Science, Social data mining, distributed learning
High performance computing, Cloud computing, exascale systems
Distributed knowledge systems, Knowledge discovery
Data-driven programming models, Parallel programming
Distributed computing systems, Peer-to-peer computing
Cellular automata and complex systems.

Scientific and Professional Career

07/01 – now Full Professor of Computer Engineering, University of Calabria, Italy.
11/17 – now Adjunct Professor, Fuzhou University, China.
09/17 – now Honorary Professor of Information Technology, Amity University, India.
02/14 – 03/17 Chair of the ICT Centre of University of Calabria, Italy.
01/09 – 08/14 Director, ICAR-CNR Institute (www.icar.cnr.it).
11/03- 01/09 Director, PhD Program in System and Computer Engineering at University of Calabria.
01/04 – 12/08 Research associate at ICAR-CNR, Rende, Italy.
06/96 – 06/01 Researcher at ISI-CNR, Rende, Italy.
02/85 – 05/96 Researcher at CRAI, Italy.

Research Projects and Grants

- Exascale programming models for extreme data processing project (ASPIDE), H2020 European Commission Programme.
- European COST Action IC1305: Network for Sustainable Ultrascale Computing (NESUS),
- GOVeIN European Invoicing Project, European Union, CEF 2015.
- “CABOTO – Cellular Automata for the Bioremoval of Toxic Contaminants”, European Commission P.C.I. EPRIT Programme.
- “COLOMBO - Parallel Computers improve Clean up of soils by Modelling Bioremediation”, European Commission EPRIT Programme.
- “KD-net - Knowledge Discovery Network of Excellence”, European Commission IST-2001-33086 Programme.
- “HPCnet - Network of Excellence in High Performance Computing”, European Commission ESPRIT Programme (Project #09004).
- “COREGrid - European Research Network on Foundations, Software Infrastructures and Applications for large scale distributed, GRID and Peer-to-Peer Technologies”, European Commission IST Programme. Member of the Executive Committee and Leader of WP2.
- “XtreemOS, Building and Promoting a Linux-based Operating System to Support Virtual Organizations for Next Generation Grids”, 6th European Framework Programme.
- “Chronius, An Open, Ubiquitous and Adaptive Chronic Disease Management Platform for COPD and Renal Insufficiency”, FP7-ICT-2007-1- 216461.
- European COST Action IC0804: Energy Efficiency in Large Scale Distributed Systems,
- “InMOTO Project”, funded by MIUR.
- “TETRIS Project”, funded by MIUR.
- “FRAME Project”, funded by MIUR.
- “P2P-CSKM-SSDM”, funded by Regione Calabria.
- “Sistemi Informatici e Calcolo Parallelo” funded by CNR.
- “GRID.IT Project” funded by MIUR.
- “DW-PTC project”, funded by TELCAL.
- “SERVIR - Servizi Innovativi alle imprese produttrici di software”, funded by Calpark.
- “Grid Computing: Tecnologie Abilitanti e Applicazioni per eScience”, funded by Fondo Speciale MIUR 1999.
- “TOCAL.IT Project” funded by MIUR.
- CNR Project “Grid and High Performance Computing”.

Industrial partnership and patents

Partnership in Industrial enterprises

04/14 - now Partner, DtoK Lab – spin-off of University of Calabria.

11/12 - 05/14 Partner, Eco4Cloud – spin-off of CNR and University of Calabria.

01/02 - 07/18 Partner, Exeura – spin-off of University of Calabria.

Patents

Peer-to-peer distributed storage system

Energy-saving system for enterprise data centers

Professional Service

Experience in evaluation and review for research organisations

- Evaluator for European Commission, FP7-ICT-2011-7 Objective 3.4 Computing systems.
- Evaluator Science Foundation Ireland (SFI).
- Evaluator for MIUR, Italian Ministry of Education, University and Scientific Research.
- Member of the European Commission expert panel “Next Generation Grid”.
- Evaluator for Government of the Russian Federation, research projects implemented by leading scientists at Russian institutions of higher learning.
- Member of the evaluation committee of the Laboratoire de l’Informatique du Parallélisme, École Normale Supérieure de Lyon, France, 2009.
- Evaluator for Estonian Research Council,
- Evaluator for the Agence Nationale de la Recherche, France.
- Evaluator for the FWO, Belgium.
- Evaluator for the Austrian Science Fund, Austria.
- Evaluator for Swiss National Science Foundation, Switzerland.
- Evaluator for the Croucher Foundation, Hong Kong.
- Member of the INFORAV Scientific Committee, Italy.
- Member of the CNR-SOGEI Agreement Management Committee, Italy.

Membership in Professional Associations

IEEE (Senior member), ACM.

Journal Associated Editor

IEEE Transactions on Parallel and Distributed Systems, 2018-now

ACM Computing Surveys, 2020-now

Journal of Cloud computing, 2014-now
International Journal of Big Data Intelligence, 2016-now
Future Generation Computer Systems, 1999-now
Scalable Computing: Practice and Experience, 1998-now
International Journal of Biomedical Data Mining, 2014-now
International Journal of Next-Generation Computing, 2010-now
International Journal on Web and Grid Services, 2004-now.
IEEE Computer Society Press, 1997-2002
IEEE Transactions on Computers, 2011-2014
IEEE Transactions on Knowledge and Data Engineering, 2005-2009
IEEE Transactions on Cloud Computing, 2014-2018
MultiAgent and Grid Systems: An International Journal, 2006-2017
Web Intelligence and Agent Systems: An International Journal, 2004-2015
INFORMATION (International Information Institute), 1999-2002

Special Issue Guest Editor

New Landscapes of the Data Stream Processing in the era of Fog Computing
Future Generation Computer Systems, 2019.

Integration of Extreme Scale Computing and Big Data Management and Analytics
IEEE Transactions on Big Data, 2017

Energy Efficiency in Large Scale Distributed Systems,
Future Generation Computer Systems, 2012.

Peer-to-Peer Computing and Interaction with Grids,
Future Generation Computer Systems, 2004.

Grid Computing,
Future Generation Computer Systems, Autumn 2002.

Parallel Data Intensive Algorithms and Applications,
Parallel Computing, Spring 2002.

Architecture-Independent Lang. and Software Tools for Parallel Processing,
IEEE Transactions on Software Engineering, Spring 2000.

Cellular Automata: Promise and Prospects in Computational Science,
Future Generation Computer Systems, Winter 1999.

Advisory Committee and Board

Advisory Committee of the IEEE Task Force on Cluster Computing (TFCC), 1999-now
Advisory Board of Euro-Par Conferences, 1997-now
Advisory Board of the Admire project, EC FP7, 2009-now
Advisory Board of the CONTRAIL project, EC FP7, 2011-now

Distinguished Speaker

IEEE Computer Society Distinguished Visitors Program, 1996-1999.
IEEE Computer Society Chapter Tutorials Program, 1998-2000.

General Co-Chair

Workshop on Distributed and Parallel Implementations of Logic Programming Systems,
Washington D.C., U.S.A., 1992.

Track on High-Performance Data Mining and KDD at Euro-Par'99, Toulouse, France,
1999.

Track on High-Performance Data Mining and KDD at Euro-Par 2000, Munich, Germany, 2000.

Track on Parallel and Distributed Databases, Data Mining and Knowledge Discovery at Euro-Par 2002, Paderborn, Germany, 2002.

Track on Parallel and Distributed Databases, Data Mining and Knowledge Discovery at Euro-Par 2003, Klagenfurt, Austria, 2003.

7th International Workshop on High Performance and Distributed Mining at SIAM DM 2004, Florida, USA, 2004

Track on Integrated Problem Solving Environments at Euro-Par 2004, Pisa, Italy, 2004.

IEEE/WIC/ACM Conference IAT 2004, Beijing, China, 2004.

Track on Parallel and Distributed Databases, Data Mining and Knowledge Discovery at Euro-Par 2005, Lisbon, Portugal, 2005.

Int. Conference on Grid computing, high-performance and Distributed Applications (GADA'06), 2006.

Track on Parallel and Distributed Databases at Euro-Par 2008, Las Palmas, Spain, 2008.

Euro-Par 2010, Ischia, Italy, 2010.

ICSDM 2011, Fuzhou, China, 2011.

ICA3PP 2013, Vietri sul Mare, Italy, 2013.

ICSDM 2015, Fuzhou, China, 2015.

Track on Distributed Algorithms at Euro-Par 2016, Grenoble, France, 2016.

IEEE DataCom 2016, Oakland, New Zeland, 2016.

Organizing Committee

Euresco Conf. on Advanced Environments and Tools for High Performance Computing, Castelvechchio Pascoli, Italy, 16-21 June 2001.

Euresco Conf. on Advanced Environments and Tools for High Performance Computing 2003, Albufeira (Algarve), Portugal, 14-19 June 2003.

Program Committee

GPMMS'94, HIPS'98, World-CNIW98, HIPS'99, ISAS'99, Euro-Par'99, PDCS-1999, ITCC2000, HIPS2000, Cancun, HPDM2000, ISAS 2000, Euro-Par 2000, ICCI'2000, HPCN2000, SLSECS-2000, PDCS 2000, Information'2000, HIPS 2001, PDDM 2001, SDM'2001, PDCS 2001, PARCO 2001, GRID 2001, HIPS 2002, GRID 2002, PDCS 2002, HPDM 2002, Euromicro PDP 2003, ISCA PDCS'02, IEEE Data Mining 2002, SDM'2003, ISCA PDCS'03, HP&LSC 2003, HeteroPar'03, HPDM'03, PPAM 2003, CLADE 2003, PDCN-2004, SDM'2004, KGGI 2003, PPGaMS'04, GP2P 2004, MML 2004, NPC 2004, KDO-2004, ACRI 2004, IPDPS 2005, EGC 2005, HIPS 2005, CCGrid 2005, ICPADS-2005, ISMIS 2005, PPGaMS'05, HPDM 2005, SDM'2005, PPAM'2005, ECML/PKDD'05, GP2P'2005, SIAM DM'06, PKDD'06, EuroPar 2007, CCGRID 2008, SIAM DM'08, HPDC 2008, IPDPS 2008, EMCL PKDD 2008, EuroPar 2008, EMCL PKDD 2009, EuroPar 2009, PPAM'2009, HPCC 2009, EMCL PKDD 2010, HPCC 2010, UCC2011, EMCL PKDD 2011, MCIS 2011, WCCTA 2011, ICA3PP 2011, TARDIS 2011, P2P-RDM 2011, ICDM'11, DAWAK 2011, ENERGY 2011, RSFDGrC-2011, ICDM 2012, UCC2012, HPC 2012, ISPDC 2012, VecPar 2012, EuroPar 2012, ICDM 2012, ACRI'12, CloudCom2012, ISPA 2012, Euro-Par 2013, Euro-Par 2014, HPCS 2013, HPCS 2014, CCGRID 2014, CLOSER 2014, DaWak 2013, IEEE

CloudCom 2013, HPP-DM 2013, PPAM 2013, PDP 2013, ISPDC 2013, DaWak 2014, ParCo 2013, Data Mining 2013, IEEE Big data 2013, ACRI 2014, C4Bio 2014, ExtremeGreen 2014, KEOD 2014, Data Mining 2014, EMSICC 2014, JSR 2014, AMT'14, IC3K 2014, SCoDiS-LaSCoG'2014, Euro-Par 2015, PARCO 2015, ECML-PKDD 2015, Euro-Par 2016, PDP 2016, Euro-Par 2017, PDP 2017, BIG DATA 2017, CLOUD 2018, Euro-Par 2018, ICUIA19, CCGRID 2019, mF2C 2019, BigDataService 2019, PDP 2019, Big Data Congress 2019, ICNSC2019, HPBench 2019, ParCo 2019, PPAM 2019, Euro-Par 2019, eScience 2019, PDDM 2019, AIIA 2019, ICAIT2019, ICCCBAD 2019.

Tutorials

PARALLEL PROGRAMMING LANGUAGES

Int. Workshop on Parallel Processing and its Applications in Physics, Chemistry and Material Science

Trieste, Italy, 5-23 September 1994.

PARALLEL PROGRAMMING LANGUAGES

IEEE First Int. Conference on Algorithms and Architectures for Parallel Processing (ICA3PP-95)

Brisbane, Australia, 19-21 April 1995.

RECENT ADVANCES IN PARALLEL PROGRAMMING TOOLS AND LANGUAGES

2nd Int. Conference on Parallel and Distributed Computing and Networking - PDCN'98

Brisbane, Australia, 14-16 December 1998.

MODELS, LANGUAGES AND TRENDS IN PARALLEL PROGRAMMING

12th Int. Conference on Parallel and Distributed Computing Systems - PDCS 2000

Las Vegas, USA, 6-9 November 2000.

PARALLEL AND DISTRIBUTED DATA MINING

Int. Parallel and Distributed Processing Symposium - IPDPS 2001

San Francisco, USA, 23-27 April 2001. (with Mohammed J. Zaki)

PARALLEL AND DISTRIBUTED DATA MINING

European Conference on Parallel Computing - EuroPar 2001

Manchester, UK, 28-31 August 2001. (with Mohammed J. Zaki)

HIGH PERFORMANCE DATA MINING AND KNOWLEDGE DISCOVERY

European Conference on Parallel Computing - EuroPar 2002

Paderborn, Germany, 27-30 August 2002.

Invited Talks

CAMEL: A Parallel Tool for Computational Science

Int. Workshop on Parallel Processing and its Applications in Physics, Chemistry and Material Science

Trieste, Italy, 5-23 September 1994.

A Parallel Cellular Automata Environment for Modeling and Simulation

COSMASE Course on Parallel Network Applications: Cellular Automata Modeling of Physical Systems

Geneva, Swiss, 26 February-1 March 1996.

Languages and Models for Parallel and Distributed Computing

Congreso Nacional de Sistemas Computacionales y Eletronicos - CNSCE'98

Cuernavaca, Mexico, 29-31 October 1998.

Language Constructs and Run-time System for Parallel Cellular Programming
Parallel and Distributed Computing Week, Griffith University
Brisbane, Australia, 14-16 December 1998.

High-Level Programming for Parallel Cellular Computations
Dagstuhl Seminar on High-Level Parallel Programming: Applicability, Analysis and
Performance
Dagstuhl, Germany, 26-30 April 1999.

Parallel Cellular Environments to Enable Scientists to Solve Complex Problems
European Research Conference on Advanced Environments and Tools for High
Performance Computing
San Feliu de Guixols, Spain, 12-17 June 1999.

Recent Advances in Parallel Programming Languages and Tools
IEEE/IMACS WORLD MULTICONFERENCE on Circuits, Systems, Communications &
Computers-CSCC'99 (Plenary Lecture)
Athens, Greece, 4-7 July 1999.

Experiences with High-Level Programming Tools for Parallel Cellular Computations
ACCS Seminar on Cellular Automata Modelling of Natural Phenomena, University of
Amsterdam
Amsterdam, The Netherlands, 15 December 1999.

Seeking Parallelism in Data Mining Techniques
3rd IPDPS Workshop on High Performance Data Mining 2000
Cancun, Mexico, 5 May, 2000.

Cellular Computing for Developing Emergent Systems on Parallel Architectures
Workshop on Strategies for Implementating Large Scale Emergent Systems
Cardiff, UK, 22-23 June, 2000.

Using SVD for Data Mining of High Dimensional Data Sets
2nd Workshop on Mining Scientific Datasets
AHPARC, Minneapolis, USA, 20-21 July, 2000.

Parallel and Distributed Knowledge Discovery on the Grid: A Reference Architecture
High Performance Data Management session at the
4th International Conference on Algorithms and Architectures for Parallel Computing
(ICA3PP)
Hong Kong, China, 11-13 December, 2000.

Knowledge Discovery and Data Mining in Grid-based Distributed Environments
Dagstuhl Seminar on Management of Metacomputers
Dagstuhl, Germany, 10-15 June, 2001.

The Knowledge Grid : Distributed Knowledge Discovery on the Grid
Industrial Grid Summit 2001
Paris, France, 27-29 June, 2001.

Tools and Services for Distributed Knowledge Discovery on Grids
Workshop HPC 2002
Cetraro, Italy, 24-27 June, 2002.

Distributed Knowledge Discovery on Grids
Informatics Colloquium
University of Klagenfurt, Austria, 2 May, 2003.

Knowledge Discovery Tools for Data Intensive Problem Solving Environments on Grids
EURESCO conference on Advanced Environments and Tools for High Performance Computing
Albufeira, Portugal, 14-19 June, 2003. Lecture slides are [here](#)

Grid-based Data Mining and the Knowledge Grid Framework
Workshop on Data Mining and Exploration Middleware for Distributed and Grid Computing
University of Minnesota Supercomputing Institute, Minneapolis, USA, 18-19 September, 2003.

Parallel and Distributed Data Mining: from Multicomputers to Grids
EMCL-PKDD'03 Workshop on Parallel and Distributed Computing for Machine Learning
Cavtat-Dubrovnik, Croatia, 22-26 September, 2003.

Knowledge Discovery Services and Tools on Grids
Symposium ISMIS 2003
Maebashi City, Japan, 28-31 October 2003.

Peer-to-Peer Protocols and Grid Services for Resource Discovery on Grids
Advanced Research Workshop HPC 2004
Cetraro, Italy, 31 May - 3 June 2004.

Using Grids for Distributed Knowledge Discovery
Mathematical Methods for Learning 2004
Como, Italy, 21-24 June 2004.

Knowledge-Based Services for Grid Applications
Future Generation Grids - FGG 2004
Dagstuhl, Germany, 1-5 November 2004.

Designing Grid Services for Distributed Knowledge Discovery
The 2005 International Conference on High Performance Computing and Communications (HPCC-05) Sorrento, Italy, 21-23 September 2005.

Grid-based Distributed Data Mining Systems, Algorithms and Services
HPDM 2006: 9th International Workshop on High Performance and Distributed Mining
Bethesda, MD, USA, 22 April 2006.

Data Integration in OGSA Grids for Distributed Information Sharing
International Advanced Research Workshop HPC 2006
Cetraro, CS, Italy, 3-6 July 2006.

Using Grids for Exploiting Data Abundance in Science
15th Euromicro International Conference on Parallel, Distributed and Network-based Processing - PDP 2007
Naples, Italy, february 7-9 2007.

From Parallel Data Mining to Grid enabled Distributed Knowledge Discovery

Joint Rough Set Symposium 2007 - JRS07
Toronto, Canada, 14-16 May 2007.

Knowledge and Data Management in Grids
CoreGRID Summer School 2007
Budapest, Hungary, 3-7 September 2007.

Grid-based Data Mining: Services for Data Analysis Applications
BioinfoGRID 2007
Milan, Italy, 10-12 December 2007.

e-Science e GRID: Le attività di Ricerca del progetto "Grid e HPC" del CNR
Conferenza Nazionale Italian e-Science 2008
Naples, Italy, 27-29 May 2008.

Using Peer-to-Peer Dynamic Querying in Grid information Services
International Advanced Research Workshop on HPC and Grids 2008
Cetraro, Italy, 30 June-04 July 2008.

P2P-MapReduce: Implementing MapReduce in Dynamic Environments (also handling
master failures)
Google EMEA Faculty Summit
Zurich, Switzerland, 10-12 February 2009.

Distributed Knowledge Discovery Services in Grids
College of Mathematics and Computer Science, Fuzhou University
Fuzhou, China, 11 June 2009.

Data Mining and Knowledge Discovery Services in Grids
Crakow'09 Grid Workshop
Crakow, Poland, 12-14 October 2009.

Data Mining in Distributed Computing Environments
Scuola della Società Italiana di Statistica
San Leucio - Caserta, Italy, 30 November - 3 December 2009.

Towards an Open Service Framework for Cloud-based Knowledge Discovery
Cloud Futures 2010 Workshop
Redmond, USA, 8-9 April 2010.

Services and Workflows for Knowledge Discovery
Workshop on HPC, Grids and Clouds
Cetraro, Italy, 21-25 June 2010.

Distributed Knowledge Discovery Services in Grids and Clouds
International Conference on Computing and Simulation (HPCS) 2010
Caen, France, June 28-July 2, 2010.

Distributed KDD: Using Services and Tools for Designing Complex Applications
1st Int. Maghrebian Conference on the Extraction and Management of Knowledge
Algiers, Algeria, December 13-14, 2010.

Service-Oriented Data Mining in Grids and Clouds
1st IEEE ICSDM Conference

Fuzhou, P.R. China, June 29-July 1, 2011.

Cloud Computing e Agenti Software: Sfide e Opportunita'
Workshop Nazionale "dagli Oggetti agli Agenti" - WOA 2011
Rende, Italy, July 4-6, 2011.

Knowledge Discovery Applications as Distributed Workflows of Services
European Conference on Data Mining 2011
Rome, Italy, July 24-26, 2011.

Data Analysis Services on Clouds and Other Research Directions
EIURA Forum on Cloud Computing 2011
Dublin, Ireland, September 30, 2011.

Data Analytics e Knowledge Management su Cloud per la sanita'
Convegno Cloud Computing per la Sanita' Digitale - Ulss Asolo
Castelfranco Veneto, Italy, October 18, 2011.

A Cloud Framework for Knowledge Discovery Workflows on Azure
HPC 2012, An International Advanced Workshop
Cetraro, Italy, June 25-29, 2012.

Using Clouds for Scalable Knowledge Discovery Applications
3rd International Workshop on High Performance Bioinformatics and Biomedicine
(HiBB), Euro-Par 2012
Rodhes, Greece, August 28, 2012.

Data Analysis Services on Clouds and Other Research Activities
ICLASS Conference 2012, Cloud Assisted Services
Bled, Slovenia, October 22-25, 2012.

Research and Technologies for Smart Cyties
Seminario Smart City, il nuovo modello di città del futuro promosso dall'Europa
Brussels, Belgium, November 29, 2012.

Scalable Data Analysis Workflows on Clouds
Dagstuhl Seminar on Parallel Data Analysis
Dagstuhl, Germany, June 16-21, 2013.

INMOTO - INformation and MObility for Tourism
Smart City Exhibition
Bologna, Italy, October 16-18, 2013.

Programming Visual and Script-based Data Analytics Workflows on Clouds
HPC 2014, An International Advanced Workshop
Cetraro, Italy, June 2014.

Programming Big Data Analysis on Clouds and Extreme Scale Systems
HPC 2016, An International Advanced Workshop
Cetraro, Italy, June 2016.

Designing Scalable Big Data Analysis on Clouds
TopHPC2017, International Congress
Teheran, Iran, April 2017.

On the Use of Cloud Computing for Big Data Mining
Int. Conference on Reliability, Infocom Technologies & Optimization (ICRITO 2017)
Noida, India, September 2017.

Exploiting Cloud Solutions for Big Data Analysis
3rd IEEE International Conference on Cloud Computing and Big Data Analysis
Chengdu, China, April 2018.

Data Analysis on Parallel, Distributed and Cloud Systems
Geographical Big Data Analysis and Applications International Summer School
Fuzhou, China, July 2018.

Programming Models for Scalable Data Analysis: Towards Smart Data on Exascale
15th Int. Conference on Semantics, Knowledge and Grids
Guangzhou, China, September 2019.

Courses Taught

1997-98

Operating Systems, Faculty of Engineering, University of Calabria.

1998-99

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

1999-2000

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

2000-2001

Introduction to Computer Science, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

Databases and Information Systems, Faculty of Sciences, Univ. of Naples Federico II.

2001-2002

Introduction to Computer Science, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

Operating Systems, Faculty of Engineering, University of Calabria.

2002-2003

Introduction to Computer Science, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

Operating Systems, Faculty of Engineering, University of Calabria.

Computer Networks, Faculty of Engineering, University of Calabria.

2003-2004

Distributed Systems, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria. Grids

and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.

Operating Systems, Faculty of Engineering, University of Calabria.

2004-2005

Distributed Systems, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria.

Operating Systems, Faculty of Engineering, University of Calabria.

2005-2006

Distributed Systems, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria. Grids

and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.

Operating Systems, Faculty of Engineering, University of Calabria.

2006-2007

Distributed Systems, Faculty of Engineering, University of Calabria.

Foundations of Computer Science, Faculty of Engineering, University of Calabria. Grids and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.
 Operating Systems, Faculty of Engineering, University of Calabria.

2007-2008
 Distributed Systems, Faculty of Engineering, University of Calabria.
 Foundations of Computer Science, Faculty of Engineering, University of Calabria. Grids and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.
 Operating Systems, Faculty of Engineering, University of Calabria.

2008-2009
 Distributed Systems, Faculty of Engineering, University of Calabria.
 Grids and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.

2009-2010
 Grids and Ubiquitous Computing System, Faculty of Engineering, University of Calabria.

2010-2011
 Distributed Systems, Faculty of Engineering, University of Calabria.

2011-2012
 Distributed Systems, Faculty of Engineering, University of Calabria.

2012-2013
 Distributed Systems, Faculty of Engineering, University of Calabria.

2013-2014
 Distributed Systems, DIMES, University of Calabria.

2014-2015
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems, DIMES, University of Calabria.

2015-2016
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems, DIMES, University of Calabria.

2016-2017
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems, DIMES, University of Calabria.

2017-2018
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems, DIMES, University of Calabria.
 Advanced Architectures and System for Data Management, DICES, University of Calabria.

2018-2019
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems and Cloud Computing, DIMES, University of Calabria.
 Advanced Architectures and System for Data Management, DICES, University of Calabria.

2019-2020
 Operating Systems, DIMES, University of Calabria.
 Distributed Systems and Cloud Computing, DIMES, University of Calabria.
 Advanced Architectures and System for Data Management, DICES, University of Calabria.

Advised PhDs

Paolo Trunfio, University of Calabria, 2004.
 Antonio Congiusta, University of Calabria, 2006.
 Carmela Comito, University of Calabria, 2006.
 Pasquale Cozza, University of Calabria, 2007.
 Giuseppe Pirrò, University of Calabria, 2009.

Marco Lackovic, University of Calabria, 2011.

Francesco Damore, University of Calabria, 2012.

Deborah Falcone, University of Calabria, 2014.

Loris Belcastro, University of Calabria, 2017.

Francesco Branda, University of Calabria, 2019.

Annexure-I

Publications of Domenico Talia¹

Books

1. D. Talia, *Big Data and the Computable Society*, World Scientific Press, 2019.
2. D. Talia, P. Trunfio, F. Marozzo, *Data Analysis in the Cloud*, Elsevier, 2015.
3. D. Talia, P. Trunfio, *Service-oriented distributed knowledge discovery*, CRC Press, USA, 2012.
4. P. D'Ambra, M. Guarracino, D. Talia (eds), *Proceedings of Euro-Par 2010*, Part I and Part II, Springer, 2010.
5. D. Talia, N. Meyer, R. Yahyapour (eds.) *Grid and Services Evolution*, Springer, USA, 2009.
6. D. Talia, R. Yahyapour, W. Ziegler (eds.), *Grid Middleware and Services: Challenges and Solutions*, Springer, USA, 2008.
7. D. Talia, A. Bilas, M. Dikaiakos (eds.), *Knowledge and Data Management in Grids*, Springer, USA, 2007.
8. N. Zhong, J. Bradshaw, S. Pal, D. Talia, J. Liu, N. Cercone (eds.), *Proceedings of the IEEE/WIC/ACM International Conference on Intelligent Agent Technology*, IEEE Computer Society, USA, 2004.
9. G. Spezzano and D. Talia, *Calcolo Parallelo, Automi Cellulari e Modelli per Sistemi Complessi*, FrancoAngeli, Milan, 1999.
10. D.B. Skillicorn and D. Talia (eds.), *Programming Languages for Parallel Processing*, IEEE Computer Society Press, Los Alamitos, CA, 1994.
11. M. Cannataro, G. Spezzano, and D. Talia, *Programmazione Logica e Architetture Parallele*, FrancoAngeli, Milan, 1993.

Publications in Refereed Journals

12. D. Talia, "A view of programming scalable data analysis: from clouds to exascale", *Journal of Cloud Computing*, vol. 8, no. 4, pp. 1-16, 2019.
13. L. Belcastro, F. Marozzo, D. Talia, "Programming Models and Systems for Big Data Analysis". *International Journal of Parallel, Emergent and Distributed Systems*, vol. 34, pp. 632-652, 2019.
14. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "ParSoDA: High-Level Parallel Programming for Social Data Mining". *Social Network Analysis and Mining*, vol. 9, n. 1, 2019.
15. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "G-ROI: Automatic Region-of-Interest detection driven by geotagged social media data". *ACM Transactions on Knowledge Discovery from Data*, vol. 12, n. 3, pp. 27:1-27:22, January 2018.
16. F. Marozzo, D. Talia, P. Trunfio, "A Workflow Management System for Scalable Data Mining on Clouds". *IEEE Transactions On Services Computing*, vol. 11, n. 3, pp. 480-492, 2018.
17. L. Belcastro, F. Marozzo, D. Talia, "Programming Models and Systems for Big Data Analysis". *International Journal of Parallel, Emergent and Distributed Systems*, 2018. To appear.
18. F. Marozzo, F. Rodrigo Duro, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "A Data-aware Scheduling Strategy for Workflow Execution in Clouds". *Concurrency and Computation: Practice and Experience*, vol. 29, n. 24, Wiley InterScience, December 2017.
19. E. Cesario, F. Marozzo, D. Talia, P. Trunfio, "SMA4TD: A Social Media Analysis Methodology for Trajectory Discovery in Large-Scale Events". *Online Social Networks and Media*, vol. 3-4, pp. 49-62, October 2017.
20. E. Cesario, C. Comito, D. Talia, "An Approach for the Discovery and Validation of Urban Mobility Patterns". *Pervasive and Mobile Computing*, 2017.
21. A. Altomare, E. Cesario, C. Comito, F. Marozzo, D. Talia, "Trajectory Pattern Mining for Urban Computing in the Cloud". *Transactions on Parallel and Distributed Systems (IEEE TPDS)*, 2017.
22. F. Marozzo, F. Rodrigo Duro, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "A Data-aware Scheduling Strategy for Workflow Execution in Clouds". *Concurrency and Computation: Practice and Experience*, vol. 29, n. 24, Wiley InterScience, December 2017.
23. C. Comito, D. Talia, P. Trunfio, "A Distributed Selectivity-driven Search Strategy for Semi-structured Data over DHT-based Networks". *Journal of Parallel and Distributed Computing*, vol. 93-94, pp. 10-29, Elsevier Science, June 2016.

¹ The list is not complete.

24. E. Cesario, C. Mastroianni, D. Talia, "Distributed Volunteer Computing for Solving Ensemble Learning Problems". *Future Generation Computer Systems*, vol. 54, pp. 68-78, January 2016.
25. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Using Scalable Data Mining for Predicting Flight Delays". *ACM Transactions on Intelligent Systems and Technology (ACM TIST)*, July 2016.
26. F. Rodrigo Duro, F. Marozzo, J. Garcia Blas, D. Talia, P. Trunfio, "Exploiting in-memory storage for improving workflow executions in Cloud platforms". *The Journal of Supercomputing*, 2016.
27. C. Comito, D. Falcone, D. Talia, P. Trunfio, "Energy-Aware Task Allocation for Small Devices in Wireless Networks". *Concurrency and Computation: Practice and Experience*, Wiley InterScience, vol. 29, 2017.
28. F. Marozzo, D. Talia, P. Trunfio, "JS4Cloud: Script-based Workflow Programming for Scalable Data Analysis on Cloud Platforms". *Concurrency and Computation: Practice and Experience*, vol. 27, n. 17, pp. 5214-5237, Wiley InterScience, December 2015.
29. G. Da Costa, T. Fahringer, J. Rico-Gallego, I. Grasso, A. Hristov, H. Karatza, A. Lastovetsky, F. Marozzo, D. Petcu, G. Stavrinides, D. Talia, P. Trunfio, H. Astsatryan, "Exascale machines require new programming paradigms and runtimes". *Supercomputing Frontiers and Innovations*, vol. 2, n. 2, pp. 6-27, September 2015.
30. E. Cesario, C. Mastroianni, D. Talia, "A Multi-Domain Architecture for Mining Frequent Items and Itemsets from Distributed Data Streams". *Journal of Grid Computing*, vol. 12, n. 1, pp. 153-168, March 2014.
31. F. Lordan, E. Tejedor, J. Ejarque, R. Rafanell, J. Álvarez, F. Marozzo, D. Lezzi, R. Sirvent, D. Talia, R. Badia, "ServiceSs: An Interoperable Programming Framework for the Cloud". *Journal of Grid Computing*, vol. 12, n. 1, pp. 67-91, 2014.
32. D. Talia, *Clouds for Scalable Big Data Analytics*, *IEEE Computer*, vol. 46, n. 5, pp. 98-101, 2013.
33. C. Comito, D. Falcone, D. Talia, P. Trunfio, "Efficient Allocation of Data Mining Tasks in Mobile Environments". *Concurrent Engineering: Research and Applications*, vol. 21, n. 3, pp. 197-207, September 2013.
34. E. Cesario, M. Lackovic, D. Talia, P. Trunfio, "Programming Knowledge Discovery Workflows in Service-Oriented Distributed Systems". *Concurrency and Computation: Practice and Experience*, vol. 25, n. 10, pp. 1482-1504, Wiley InterScience, July 2013.
35. E. Cesario, C. Mastroianni, D. Talia, "A Multi-Domain Architecture for Mining Frequent Items and Itemsets from Distributed Data Streams". *Journal of Grid Computing*, 2013.
36. F. Lordan, E. Tejedor, J. Ejarque, R. Rafanell, J. Álvarez, F. Marozzo, D. Lezzi, R. Sirvent, D. Talia, R. Badia, "ServiceSs: An Interoperable Programming Framework for the Cloud". *Journal of Grid Computing*, pp. 1-25, 2013.
37. G. Pirrò, D. Talia, P. Trunfio, "A DHT-Based Semantic Overlay Network for Service Discovery". *Future Generation Computer Systems*, vol. 28, n. 4, pp. 689-707, Elsevier Science, April 2012.
38. D. Talia, "Clouds Meet Agents: Toward Intelligent Cloud Services". *IEEE Internet Computing*, vol. 16, n. 2, pp. 78-81, IEEE Computer Society, 2012.
39. T. Trinh, H. Hlavacs, D. Talia, "Energy efficiency in large-scale distributed systems". *Future Generation Computer Systems*, vol. 28, n. 5, pp. 743-744, May 2012.
40. F. Marozzo, D. Talia, P. Trunfio, "P2P-MapReduce: Parallel data processing in dynamic Cloud environments". *Journal of Computer and System Sciences*, Elsevier Science, 2012.
41. E. Cesario, D. Talia, "Distributed Data Mining Patterns and Services: An Architecture and Experiments". *Concurrency and Computation: Practice and Experience*, 2011.
42. C. Comito, D. Talia, "P2P Schema-Mapping over Network-bound XML Data". *Concurrency and Computation: Practice and Experience*, vol. 23, n. 9, 2011.
43. D. Talia, P. Trunfio, "Enabling dynamic querying over distributed hash tables". *Journal of Parallel and Distributed Computing*, vol. 70, n. 12, pp. 1254-1265, Elsevier Science, December 2010.
44. D. Talia, P. Trunfio "How Distributed Data Mining Tasks can Thrive as Knowledge Services", *Communications of the ACM*, July 2010.
45. G. Pirrò, C. Mastroianni, D. Talia, "A Framework for Distributed Knowledge Management: Design and Implementation". *Future Generation Computer Systems*, vol. 26, n. 1, pp. 38-49, January 2010.
46. C. Comito, A. Gounaris, R. Sakellariou, D. Talia, "A service-oriented system for distributed data querying and integration on Grids". *Future Generation Computer Systems*, vol. 25, n. 5, pp. 511-524, Elsevier Science, May 2009.
47. C. Mastroianni, P. Cozza, D. Talia, I. Kelley, I. Taylor, "A Scalable Super-Peer Approach for Public Scientific Computation". *Future Generation Computer Systems*, vol. 25, n. 3, pp. 213-223, Elsevier Science, March 2009.

48. G. Pirrò, M. Ruffolo, D. Talia, "Leveraging Peer-to-Peer and Ontologies for the Extended Enterprise". *International Journal of Business Process Integration and Management. Special Issue in Innovations in the Extended Enterprise.*, vol. 3, n. 3, 2009.
49. G. Pirrò, M. Ruffolo, D. Talia, "SECCO: On Building Semantic Links in Peer-to-Peer Networks". *Journal on Data Semantics*, vol. XII, pp. 1-36, 2009.
50. G. Pirrò, C. Mastroianni, D. Talia, "A Framework for Distributed Knowledge Management: Design and Implementation". *Future Generation Computer Systems*, 2010.
51. C. Lucchese, C. Mastroianni, S. Orlando, D. Talia, "Mining@home: Towards a Public Resource Computing Framework for Distributed Data Mining". *Concurrency and Computation: Practice and Experience*, Wiley InterScience, 2009.
52. D. Talia, P. Trunfio, O. Verta, "The Weka4WS framework for distributed data mining in service-oriented Grids". *Concurrency and Computation: Practice and Experience*, Wiley InterScience, June 2008.
53. E. Cesario, D. Talia, "Using Grids for Exploiting the Abundance of Data in Science". *Scalable Computing: Practice and Experience*, vol. 11, n. 3, pp. 251-262, 2010.
54. G. Pirrò, D. Talia, "LOM: a Linguistic Ontology Matcher Based on Information Retrieval". *Journal of Information Science*, 2010.
55. P. Herrero, D. Katz, M. Perez, D. Talia, "Grid computing, high-performance and distributed applications". *Future Generation Computer Systems*, vol. 26, pp. 257-258, Elsevier Science, 2010.
56. G. Pirrò, M. Ruffolo, D. Talia, "SECCO: On Building Semantic Links in Peer-to-Peer Networks". *Journal on Data Semantics*, 2010.
57. M. Cannataro, D. Talia, G. Tradigo, P. Trunfio, P. Veltri, "SIGMCC: a System for Sharing Meta Patient Records in a Peer-to-peer Environment". *Future Generation Computer Systems*, vol. 24, n. 3, pp. 222-234, Elsevier Science, March 2008.
58. A. Congiusta, D. Talia, P. Trunfio, "Service-Oriented Middleware for Distributed Data Mining on the Grid". *Journal of Parallel and Distributed Computing*, vol. 68, n. 1, pp. 3-15, Elsevier Science, January 2008.
59. P. Trunfio, D. Talia, H. Papadakis, P. Fragopoulou, M. Mordacchini, M. Pennanen, K. Popov, V. Vlassov, S. Haridi, "Peer-to-Peer resource discovery in Grids: Models and systems". *Future Generation Computer Systems*, vol. 23, n. 7, pp. 864-878, Elsevier Science, August 2007.
60. A. Congiusta, D. Talia, P. Trunfio, "Distributed data mining services leveraging WSRF". *Future Generation Computer Systems*, vol. 23, n. 1, pp. 34-41, Elsevier Science, January 2007.
61. E. Al-Shakarchi, P. Cozza, A. Harrison, C. Mastroianni, M. Shields, D. Talia, I. Taylor, "Distributing workflows over a ubiquitous P2P network". *Scientific Programming*, vol. 15, n. 4, pp. 269-281, IOS Press, 2007.
62. G. Pirrò, M. Ruffolo, D. Talia, "Leveraging Peer-to-Peer and Ontologies for the Extended Enterprise". *International Journal of Business Process Integration and Management. Special Issue in Innovations in the Extended Enterprise.* vol. 3, n. 3, 2007.
63. C. Comito, C. Mastroianni, D. Talia, "Metadata, Ontologies and Information Models for Resource Management in Grid-based PSE Toolkits". *International Journal of Web Services Research*, vol. 3, n. 4, pp. 52-72, IDEA Group Publishing, October 2006.
64. C. Mastroianni, D. Talia, O. Verta, "A super-peer model for resource discovery services in large-scale Grids". *Future Generation Computer Systems*, vol. 21, n. 8, pp. 1235-1248, Elsevier Science Publishers B. V., October 2005.
65. D. Talia, P. Trunfio, "Adapting a Pure Decentralized Peer-to-Peer Protocol for Grid Services Invocation". *Parallel Processing Letters*, vol. 15, n. 1-2, pp. 67-84, World Scientific Publishing Company, March 2005.
66. C. Comito, D. Talia, P. Trunfio, "Grid Services: principles, implementations and use". *International Journal of Web and Grid Services*, vol. 1, n. 1, pp. 48-68, Inderscience Publishers, 2005.
67. A. Iamnitchi and D. Talia, "P2P Computing and Interaction with Grids", *Future Generation Computer Systems*, North-Holland, vol. 21, no.3, pp. 331-332, 2005.
68. M. Cannataro and D. Talia, "Semantics and Knowledge Grids: Building the Next-Generation Grid", *IEEE Intelligent Systems*, vol. 19, no 1. pp. 56-63, 2004.
69. C. Mastroianni, D. Talia D. , P. Trunfio, "Metadata for Managing Grid Resources in Data Mining Applications", *Journal of Grid Computing*, Kluwer, pp. 1-18, 2004.
70. M. Cannataro, A. Congiusta, A. Pugliese, D. Talia, P. Trunfio, "Distributed Data Mining on Grids: Services, Tools, and Applications", *IEEE Transactions on Systems, Man, Cybernetics, Part B*, vol. 34, n. 6, pp. 1-15, 2004.

71. G. Manco, C. Pizzuti, D. Talia, "Eureka!: An Interactive and Visual Knowledge Discovery Tool", *Journal of Visual Languages and Computing*, Elsevier, vol. 15, no.1, pp. 1-35, 2004.
72. D. Talia, P. Trunfio, "Toward a Synergy Between P2P and Grids", *IEEE Internet Computing*, vol. 7, no. 4, pp. 94-96, 2003.
73. A. Conguista, A. Pugliese, D. Talia, P. Trunfio, "Designing Grid Services for Distributed Knowledge Discovery", *Web Intelligence and Agent Systems: An International Journal*, IOS Press, vol. 1, no. 2, pp. 91-104, 2003.
74. M. Cannataro, D. Talia, "The Knowledge Grid", *Communications of the ACM*, vol. 46, no. 1, pp. 89-93, 2003.
75. C. Pizzuti, D. Talia, "P-AutoClass: Scalable Parallel Clustering for Mining Large Data Sets", *IEEE Transactions on Knowledge and Data Engineering*, vol. 15, no. 3, pp. 629-641, 2003.
76. D. Talia, "The Open Grid Services Architecture - Where the Grid Meets the Web", *IEEE Internet Computing*, vol. 6, no. 6, pp. 67-71, 2002.
77. D. Skillicorn, D. Talia, "Mining Large Data Sets on Grids: Issues and Prospects", *Computing and Informatics*, vol. 21, no. 4, pp. 347-362, 2002.
78. G. Aloisio, D. Talia, "Grid Computing: Towards a New Computing Infrastructure", *Future Generation Computer Systems*, North-Holland, vol. 18, no. 8, pp. v-vi, 2002.
79. M. Cannataro, D. Talia, P. Trunfio, "Distributed Data Mining on the Grid", *Future Generation Computer Systems*, North-Holland, vol. 18, no. 8, pp. 1101-1112, 2002.
80. D. Talia, P.K. Srimani, "Guest Editorial: Parallel Data Intensive Algorithms and Applications", *Parallel Computing*, vol. 28, no. 5, pp. 669-671, 2002.
81. M. Cannataro, D. Talia, P.K. Srimani, "Parallel Data Intensive Computing in Scientific and Commercial Applications", *Parallel Computing*, vol. 28, no. 5, pp. 673-704, 2002.
82. G. Spezzano, D. Talia, "CAMELot: A Parallel Cellular Environment for Modelling Complexity", *AI*IA Notizie*, vol. XIV, no. 2, 2001. (invited)
83. D. Talia, "Cellular Processing Tools for High-Performance Simulation", *IEEE Computer*, vol. 33, no. 9, pp. 44-52, 2000.
84. D. Talia, P. Srimani, and M. Jazayeri, "Guest Editors' Introduction: Architecture-Independent Languages and Software Tools for Parallel Processing", *IEEE Transactions on Software Engineering*, vol. 26, no. 3, pp. 193-196 and no. 4, pp. 289-292, 2000.
85. D. Talia, "Models and Trends in Parallel Programming", *Parallel Algorithms and Applications*, vol. 16, no. 2-3, pp. 145-180, 2001.
86. D. Talia and P. Sloot, "Cellular Automata: Promise and Prospects in Computational Science", *Future Generation Computer Systems*, North-Holland, vol. 16, no. 2-3, pp. 1-3, 1999.
87. G. Spezzano and D. Talia, "Programming Cellular Automata Algorithms on Parallel Computers", *Future Generation Computer Systems*, North-Holland, vol. 16, no. 2-3, pp. 203-216, 1999.
88. C. Pizzuti and D. Talia, "Knowledge Discovery e Data Mining: Concetti, Algoritmi e Sistemi", *Rivista di Informatica*, vol. XXIX, no. 1, pp. 31-74, 1999.
89. D.B. Skillicorn and D. Talia, "Models and Languages for Parallel Computation", *ACM Computing Surveys*, vol. 30, no. 2, pp. 123-169, June 1998.
90. G. Spezzano and D. Talia, "The CARPET Programming Environment for Solving Scientific Problems on Parallel Computers", *Parallel and Distributed Computing Practices*, NOVA Science Publishers, vol. 1, no. 3, pp. 49-61, September 1998.
91. G. Spezzano and D. Talia, "Designing Parallel Models of Soil Contamination by the CARPET Language", *Future Generation Computer Systems*, North-Holland, vol. 13, no. 4-5, pp. 291-302, 1998.
92. S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "High Performance Scientific Computing by a Parallel Cellular Environment", *Future Generation Computer Systems*, North-Holland, vol. 12, no. 5, pp. 357-369, 1997.
93. D. Talia, "Parallel Computation Still Not Ready for the Mainstream", *Communications of the ACM*, vol. 40, no. 7, pp. 98-99, 1997.
94. S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "A Parallel Cellular Tool for Interactive Modeling and Simulation", *IEEE Computational Science & Engineering*, vol. 3, no. 3, pp. 33-43, 1996.
95. S. Di Gregorio, F. Nicoletta, R. Rongo, C. Siciliano, M. Sorriso-Valvo, G. Spezzano, D. Talia, "Simulazione di Frane con Automi Cellulari", *Computazione Evolutiva*, vol. 1, pp. 5-16, 1996.

96. M. Cannataro, S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, and D. Talia, "A Parallel Cellular Automata Environment on Multicomputers for Computational Science", *Parallel Computing*, North-Holland, vol. 21, no. 5, pp. 803-824, 1995.
97. D. Talia, "Parallel Logic Programming Systems on Multicomputers", *Journal of Programming Languages*, Chapman & Hall, vol. 2, no. 1, pp. 77-87, March 1994.
98. M. Cannataro, Ya. D. Sergeyev, G. Spezzano, and D. Talia, "PNS : A Dynamic Mapping Strategy for Massively Parallel Computers", *Computers and Artificial Intelligence*, vol. 13, no. 5, 1994.
99. D. Talia, "Message Routing Systems for Transputer-Based Multicomputers", *IEEE Micro*, vol. 13, no. 3, pp. 62-72, 1993.
100. D. Talia, "A Survey of PARLOG and Concurrent Prolog: The Integration of Logic and Parallelism", *Computer Languages*, Pergamon Press, vol. 18, no. 3, pp. 185-196, 1993.
101. D. Talia, "Distributed Termination of Concurrent Processes in Occam", *Computer Languages*, Pergamon Press, vol. 19, no. 1, pp. 51-62, 1993.
102. D. Talia, "Reti Neurali: Modelli ed Algoritmi", *Rivista di Informatica*, Masson, vol. XXIII, no. 2, pp. 127-144, 1993.
103. M. Cannataro, G. Spezzano, and D. Talia, "Un Algoritmo di Routing Esente da Deadlock per Sistemi Paralleli", *Rivista di Informatica*, Masson, vol. XXIII, no. 1, pp. 31-48, 1993.
104. M. Cannataro, G. Spezzano, and D. Talia, "High Level Communication Mechanisms for Distributed Parallel Computers from an Adaptive Message Routing", *Future Generation Computer Systems*, North-Holland, vol. 8, no. 1-3, pp. 253-255, 1992.
105. M. Cannataro, E. Gallizzi, G. Spezzano, and D. Talia, "Design, Implementation and Evaluation of a Deadlock-Free Routing Algorithm for Concurrent Computers", *Concurrency: Practice and Experience*, John Wiley & Sons, vol. 4, no. 2, pp. 143-161, April 1992.
106. D. Conforti, L. Grandinetti, R. Musmanno, M. Cannataro, G. Spezzano, and D. Talia, "A Model of Efficient Asynchronous Parallel Algorithms on Multicomputer Systems", *Parallel Computing*, North-Holland, vol. 18, no. 1, pp. 31-45, January 1992.
107. M. Cannataro, G. Spezzano, and D. Talia, "A Parallel Logic System on a Multicomputer Architecture", *Future Generation Computer Systems*, North-Holland, vol. 6, no. 4, pp. 317-331, 1991.
108. D. Talia, "Programmazione Logica Concorrente: PARLOG e Concurrent Prolog", *Rivista di Informatica*, Masson, vol. XX, no. 4, pp. 345-364, 1990.
109. G. Spezzano, D. Talia, and M. Vanneschi, "A Concurrent Programming Support for Distributed Systems", *Computing Systems*, vol. 3, no. 3, pp. 423-447, 1990.

Book Chapters

110. A. Bilas, J. Carretero, T. Cortes, J. Garcia Blas, P. Gonzalez Ferez, A. Papagiannis, A. Queralt, F. Marozzo, G. Saloustros, A. Shoker, D. Talia, P. Trunfio, "Data management techniques". In: *Ultrascale Computing Systems*, J. Carretero, E. Jeannot, A. Zomaya (Editors), IET, Computing, pp. 85-126, 2019.
111. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "A High-Level Programming Library for Mining Social Media". *Post-Proc. of the High Performance Computing Workshop 2018*, Cetraro, Italy, *Advances in Parallel Computing*, IOS Press, July 2018.
112. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Big Data Analysis on Clouds". In: *Handbook of Big Data Technologies*, A. Zomaya, S. Sakr (Editors), Springer, pp. 101-142, 2017.
113. F. Marozzo, D. Talia, P. Trunfio, "Implementing MapReduce Applications in Dynamic Cloud Environments". In: *Cloud Computing: Principles, Systems and Applications*, second edition, N. Antonopoulos, L. Gillam (Editors), Springer, pp. 211-223, 2017.
114. F. Marozzo, D. Talia, P. Trunfio, "Cloud Services for Distributed Knowledge Discovery". In: *Encyclopedia of Cloud Computing*, S. Murugesan, I. Bojanova (Editors), Wiley-IEEE, pp. 774-785, 2016.
115. P. Agrawal, D. Borgetto, C. Comito, G. Da Costa, J. Pierson, P. Prakash, S. Rao, D. Talia, C. Thiam, P. Trunfio, "Scheduling and Resource Allocation". In: *Large Scale Distributed Systems and Energy Efficiency: A Holistic View*, J. Pierson (Editor), Wiley, *Parallel and Distributed Computing*, pp. 225-260, 2015.
116. E. Cesario, C. Mastroianni, D. Talia, "Mining Distributed Data Streams on Content Delivery Networks". In: *Advanced Content Delivery, Streaming, and Cloud Services*, M. Pathan, K. Sitaraman, D. Robinson (Editors), John Wiley & Sons, Hoboken, NJ, USA, 2014.

117. P. Agrawal, D. Borgetto, C. Comito, G. Da Costa, J. Pierson, P. Prakash, S. Rao, D. Talia, C. Thiam, P. Trunfio, "Scheduling and Resource Allocation". In: *Large Scale Distributed Systems and Energy Efficiency: A Holistic View*, J. Pierson (Editor), Wiley, Parallel and Distributed Computing, 2014.
118. F. Marozzo, D. Talia, P. Trunfio, "A Cloud Framework for Big Data Analytics Workflows on Azure". In: *Cloud Computing and Big Data*, C. Catlett, W. Gentsch, L. Grandinetti, G. Joubert, J. Vazquez-Poletti (Editors), IOS Press, Amsterdam, The Netherlands, *Advances in Parallel Computing*, vol. 23, pp. 182-191, 2013.
119. E. Cesario, M. Lackovic, D. Talia, P. Trunfio, "A Visual Environment for Designing and Running Data Mining Workflows in the Knowledge Grid". In: *Data Mining: Foundations and Intelligent Paradigms*, D. Holmes, L. Jain (Editors), Springer, 2012.
120. C. Comito, D. Talia, P. Trunfio, "An Energy Aware Framework for Mobile Data Mining". In: *Energy Efficient Distributed Computing Systems*, A. Zomaya, Y. Choon Lee (Editors), John Wiley & Sons, chapt. 23, 2012.
121. E. Cesario, M. Lackovic, D. Talia, P. Trunfio, "Service-Oriented Data Analysis in Distributed Computing Systems". In: *High Performance Computing: From Grids and Clouds to Exascale*, I. Foster, W. Gentsch, L. Grandinetti, G. Joubert (Editors), IOS Press, Amsterdam, The Netherlands, *Advances in Parallel Computing*, vol. 20, pp. 225-245, 2011.
122. E. Cesario, N. De Caria, C. Mastroianni, D. Talia, "Distributed Data Mining Using a Public Resource Computing Framework". In: *Grids, P2P and Service computing*, F. Desprez, V. Getov, T. Priol, R. Yahyapour (Editors), Springer, 2010.
123. H. Papadakis, P. Trunfio, D. Talia, P. Fragopoulou, "An Experimental Evaluation of the DQ-DHT Algorithm in a Grid Information Service". In: *Grids, P2P and Services Computing*, F. Desprez, V. Getov, T. Priol, R. Yahyapour (Editors), Springer, USA, pp. 59-72, 2010.
124. D. Talia, P. Trunfio, "Mobile Data Mining on Small Devices Through Web Services". In: *Mobile Intelligence: Mobile Computing and Computational Intelligence*, L. Yang, A. Waluyo, J. Ma, L. Tan, B. Srinivasan (Editors), John Wiley & Sons, 2009.
125. H. Papadakis, P. Trunfio, D. Talia, P. Fragopoulou, "Design and Implementation of a Hybrid P2P-based Grid Resource Discovery System". In: *Making Grids Work*, M. Danelutto, P. Fragopoulou, V. Getov (Editors), Springer, USA. 2009.
126. G. Antoniu, A. Congiusta, S. Monnet, D. Talia, P. Trunfio, "Peer-to-Peer Metadata Management for Knowledge Discovery Applications in Grids". In: *Grid Middleware and Services: Challenges and Solutions*, D. Talia, R. Yahyapour, W. Ziegler (Editors), Springer, USA, 2009.
127. E. Cesario, A. Congiusta, D. Talia, P. Trunfio, "Data Analysis Services in the Knowledge Grid". In: *Data Mining Techniques in Grid Computing Environments*, W. Dubitzky (Editor), John Wiley & Sons, 2009.
128. P. Cozza, I. Kelley, C. Mastroianni, D. Talia, I. Taylor, "Cache-Enabled Super-Peer Overlays for Multiple Job Submission on Grids". In: *Grid Middleware and Services: Challenges and Solutions*, D. Talia, R. Yahyapour, W. Ziegler (Editors), Springer, USA, 2009.
129. D. Talia, P. Trunfio, "Service-Oriented Architectures for Distributed and Mobile Knowledge Discovery". In: *Next Generation of Data Mining*, H. Kargupta, J. Han, P. Yu, R. Motwani, V. Kumar (Editors), CRC Press, 2009.
130. M. Lackovic, D. Talia, P. Trunfio, "A Framework for Composing Knowledge Discovery Workflows in Grids". In: *Foundations on Computational Intelligence*, A. Abraham (Editor), Springer, 2009.
131. C. Mastroianni, G. Pirrò, D. Talia, "K-Link+: A P2P Semantic Virtual Office for Organizational Knowledge Management". In: *Semantic Knowledge Management: An Ontology-Based Framework*, A. Zilli, E. Damiani, P. Ceravolo, A. Corallo, G. Elia (Editors), IGI Publishing, 2008.
132. D. Talia, P. Trunfio, J. Zeng, M. Höggqvist, "A Peer-to-Peer Framework for Resource Discovery in Large-Scale Grids". In: *Achievements in European Research on Grid Systems*, S. Gorlatch, M. Bubak, T. Priol (Editors), Springer, USA, pp. 123-137, 2008.
133. A. Congiusta, D. Talia, P. Trunfio, "Using Grids for Distributed Knowledge Discovery". In: *Mathematical Methods for Knowledge Discovery and Data Mining*, G. Felici, C. Vercellis (Editors), IGI Global, Hershey, USA, chapt. XVII, pp. 284-298, 2007.
134. A. Congiusta, D. Talia, P. Trunfio, "WSRF-Based Services for Distributed Data Mining". In: *Knowledge and Data Management in Grids*, D. Talia, A. Bilas, M. Dikaiakos (Editors), Springer, USA, pp. 203-220, 2007.
135. M. Cannataro, D. Talia, P. Trunfio, "Grids for Ubiquitous Computing and Ambient Intelligence". In: *Ambient Intelligence, Wireless Networking, Ubiquitous Computing*, A. Vasilakos, W. Pedrycz (Editors), Artech House, chapt. 7, pp. 127-142, 2006.

136. A. Congiusta, D. Talia, P. Trunfio, "A Visual Programming Environment for Developing Complex Grid Applications". In: *Grid Computing: Software Environments and Tools*, J. Cunha, O. Rana (Editors), Springer, London, UK, chapt. 11, pp. 257-283, 2006.
137. A. Congiusta, D. Talia, P. Trunfio, "On Designing and Composing Grid Services for Distributed Data Mining". In: *Future Generation Grids*, V. Getov, D. Laforenza, A. Reinefeld (Editors), Springer, USA, pp. 113-132, 2006.
138. D. Talia, P. Trunfio, "Peer-to-Peer Protocols and Grid Services for Resource Discovery on Grids". In: *Grid Computing: The New Frontier of High Performance Computing*, L. Grandinetti (Editor), Elsevier Science, Amsterdam, The Netherlands, *Advances in Parallel Computing*, vol. 14, pp. 83-103, 2005.
139. A. Congiusta, D. Talia, P. Trunfio, "Parallel and Grid-Based Data Mining". In: *The Data Mining and Knowledge Discovery Handbook*, O. Maimon, L. Rokach (Editors), Springer, USA, pp. 1017-1041, 2005.
140. D. Talia, "Parallel Cellular Algorithms and Programs". In: *Handbook of Bioinspired Algorithms and Applications*, S. Olariu, A. Zomaya (Editors), Chapman & Hall/CRC, Boca Raton, Florida, chapt. 6, pp. 85-101, 2005.
141. M. Cannataro, D. Talia, P. Trunfio, "Design of Distributed Data Mining Applications on the Knowledge Grid", in *Data Mining - Next Generation Challenges and Future Directions*, H. Kargupta et al. (eds.), The MIT Press, chapt. 4, pp. 67-88, 2004.
142. M. Cannataro, A. Congiusta, C. Mastroianni, A. Pugliese, D. Talia, P. Trunfio, "Grid-Based Data Mining and Knowledge Discovery", in *Intelligent Technologies for Information Analysis*, N. Zhong and J. Liu (eds.), Springer-Verlag, chapt. 2, pp. 19-45, 2004.
143. C. Lee, D. Talia, "Grid Programming Models: Current Tools, Issues and Directions", in *Grid Computing: Making the Global Infrastructure a Reality*, F. Berman, G. Fox and T. Hey (eds.), Wiley, chapt. 21, pp. 555-578, 2003.
144. D. Talia, "Parallel Data Mining", in *Dealing with the Data Flood*, J. Meij (ed.), STT, chapt. 6.4.2, pp. 813-822, 2002.
145. E. Maltseva, C. Pizzuti, D. Talia, "Mining High-Dimensional Scientific Data Using Singular Value Decomposition", in *Data Mining for Scientific and Engineering Applications*, R. Grossman et al. (eds.), Kluwer Academic Publ., pp. 425-438, 2001.
146. D. Talia, "The Role of Parallel Cellular Programming in Computational Science", *Vector and Parallel Processing - VECPAR'2000 Post Conf. Book*, J. Palma et al (Eds.), LNCS 1981, Springer-Verlag, pp. 207-220, 2001
147. D. Talia, "Advances in Programming Languages for Parallel Computing", in *Annual Review of Scalable Computing*, C.K. Yuen and K. Hwang (Eds.), chapter 2, pp. 28-58, World Scientific Publishing and Singapore University Press, 2000.
148. G. Spezzano, D. Talia, "Experiences Using High-Level Programming for Parallel Cellular Computation", in *High Performance Computing Systems and Applications*, A. Pollard et al. (Eds.), chapter 51, Kluwer Academic Publishers, pp. 515-528, 2000.
149. D. Talia, "Recent Advances in Parallel Programming Languages and Tools". In: *Advances in Intelligent Systems and Computer Science*, WSES Press, 1999.
150. Cannataro M., Spezzano G., Talia D., "Logic Program Execution on Distributed Memory Parallel Computers", in *Parallel Computing on Distributed Memory Multiprocessors*, F. Ozguner and F. Ercal, (Eds.), NATO ASI Series F, Springer-Verlag, Berlin, vol. 103, pp. 205-216, 1993.
151. Cannataro M., Spezzano G., Talia D., "PALM : A Logic Programming System on a Highly Parallel Architecture", in *VLSI for Neural Networks and Artificial Intelligence*, J.G. Delgado-Frias and W. R. Moore (Eds), Plenum, New York, pp. 255-265, 1994.
152. Cannataro M., Spezzano G., Talia D., "A Multi-Transputer Architecture for a Parallel Logic Machine", in *VLSI for Artificial Intelligence and Neural Networks*, J.G. Delgado Frias and W. R. Moore (Eds.), Plenum, New York, pp. 165-174, 1991.

Papers in Refereed Conference Proceedings

153. D. Talia, P. Trunfio, F. Marozzo, L. Belcastro, J. Garcia Blas, D. Del Rio, P. Couvè, G. Goret, L. Vincent, A. Fernandez-Pena, D. Martin de Blas, M. Nardi, T. Pizzuti, A. Spataru, M. Justyna, "A Novel Data-Centric Programming Model for Large-Scale Parallel Systems". *Euro-Par Workshops*, Springer, 2019.

154. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Developing a Cloud-based Algorithm for Analyzing the Polarization of Social Media Users". 5th International Symposium, ALGO CLOUD 2019, Munich, Germany, 2019. Note: To appear.
155. L. Belcastro, R. Cantini, F. Marozzo, D. Talia, P. Trunfio, "Discovering Political Polarization on Social Media: A Case Study". The 15th International Conference on Semantics, Knowledge and Grids, Guangzhou, China, 2019.
156. F. Marozzo, F. Marzano, D. Talia, P. Trunfio, "BitTorrentSW: A Sleep-and-Wake approach to reduce energy consumption in BitTorrent networks". The 2018 International Conference on High Performance Computing & Simulation (HPCS 2018), Orléans, France, 2018.
157. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Appraising SPARK on Large-Scale Social Media Analysis". Euro-Par Workshops, Santiago de Compostela, Spain, Lecture Notes in Computer Science, pp. 483-495, August 2017.
158. F. Marozzo, F. Rodrigo Duro, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "Evaluating a Data-Aware Scheduling Approach to Reduce Processing Costs of DMCF Workflows". The 2017 International Conference on High Performance Computing & Simulation (HPCS 2017), Genoa, Italy, pp. 699-706, July 2017.
159. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Appraising SPARK on Large-Scale Social Media Analysis". Euro-Par Workshops, Springer, August 2017.
160. F. Marozzo, F. Rodrigo Duro, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "Evaluating a Data-Aware Scheduling Approach to Reduce Processing Costs of DMCF Workflows". The 2017 International Conference on High Performance Computing & Simulation (HPCS 2017), Genoa, Italy, pp. 699-706, July 2017.
161. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "A Parallel Library for Social Media Analytics". The 2017 International Conference on High Performance Computing & Simulation (HPCS 2017), Genoa, Italy, pp. 683-690, July 2017.
162. F. Marozzo, F. Rodrigo Duro, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "A Data-Aware Scheduling Strategy for DMCF workflows over Hercules". Proc. of the Third International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2016), Sofia, Bulgaria, pp. 37-44, October 2016.
163. E. Cesario, A. Iannazzo, F. Marozzo, F. Morello, D. Talia, P. Trunfio, "Nubytics: Scalable Cloud Services for Data Analysis and Prediction". 2nd International Forum on Research and Technologies for Society and Industry (RTSI 2016), Bologna, Italy, pp. 1-6, September 2016.
164. E. Cesario, A. Iannazzo, F. Marozzo, F. Morello, G. Riotta, A. Spada, D. Talia, P. Trunfio, "Analyzing Social Media Data to Discover Mobility Patterns at EXPO 2015: Methodology and Results". The 2016 International Conference on High Performance Computing & Simulation (HPCS 2016), Innsbruck, Austria, pp. 230-237, July 2016.
165. F. Rodrigo Duro, F. Marozzo, J. Garcia Blas, J. Carretero, D. Talia, P. Trunfio, "Evaluating data caching techniques in DMCF workflows using Hercules". Proc. of the Second International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2015), Krakow, Poland, pp. 69-76, September 2015.
166. E. Cesario, C. Congedo, F. Marozzo, G. Riotta, A. Spada, D. Talia, P. Trunfio, C. Turri, "Following Soccer Fans from Geotagged Tweets at FIFA World Cup 2014". Proc. of the 2nd IEEE Conference on Spatial Data Mining and Geographical Knowledge Services, Fuzhou, China, pp. 33-38, July 2015.
167. A. Altomare, E. Cesario, D. Talia, "Energy-Aware Migration of Virtual Machines Driven by Predictive Data Mining Models". Proceedings of the 23rd Euromicro International Conference on Parallel, Distributed and Network-Based Computing (PDP 2015), Turku, Finland, pp. 549-553, IEEE, 2015.
168. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "Programming Visual and Script-based Big Data Analytics Workflows on Clouds". Post-Proc. of the High Performance Computing Workshop 2014, Cetraro, Italy, Advances in Parallel Computing, vol. 26, pp. 18-31, IOS Press, 2015.
169. F. Marozzo, D. Talia, P. Trunfio, "A Workflow-oriented Language for Scalable Data Analytics". Proc. of the First International Workshop on Sustainable Ultrascale Computing Systems (NESUS 2014), Porto, Portugal, pp. 7-12, August 2014.
170. A. Altomare, E. Cesario, C. Comito, F. Marozzo, D. Talia, "Trajectory Pattern Mining over a Cloud-based Framework for Urban Computing". Proc. of the 16th International Conference on High Performance Computing and Communications (HPCC 2014), Paris, France, pp. 367-374, IEEE, 2014.

171. F. Marozzo, D. Talia, P. Trunfio, "Scalable Script-based Data Analysis Workflows on Clouds". Proc. of the 8th Workshop on Workflows in Support of Large-Scale Science (WORKS 2013), Denver, CO, USA, pp. 124-133, ACM Press, November 2013.
172. G. Agapito, M. Cannataro, P. Guzzi, F. Marozzo, D. Talia, P. Trunfio, "Cloud4SNP: Distributed Analysis of SNP Microarray Data on the Cloud". Proc. of the ACM Conference on Bioinformatics, Computational Biology and Biomedical Informatics 2013 (ACM BCB 2013), Washington, DC, USA, pp. 468, ACM Press, September 2013.
173. E. Cesario, C. Comito, D. Talia, "Towards a Cloud-based framework for Urban Computing. The Trajectory Analysis Case.". Proc. of the 3rd IEEE International Conference on Cloud and Green Computing (CGC 2013), pp. 16-23, IEEE, 2013.
174. A. Altomare, E. Cesario, C. Comito, F. Marozzo, D. Talia, "Using Clouds for Smart City Applications". Proc. of the 5th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2013), Bristol, UK, pp. ??-??, IEEE, 2013.
175. C. Comito, D. Falcone, D. Talia, P. Trunfio, "A distributed allocation strategy for data mining tasks in mobile environments". Proc. of the 6th International Symposium on Intelligent Distributed Computing (IDC 2012), Calabria, Italy, Studies in Computational Intelligence, vol. 446, pp. 231-240, Springer, September 2012.
176. E. Cesario, C. Mastroianni, D. Talia, "Using Mining@home for Distributed Ensemble Learning". Proc. of the 5th International Conference on Data Management in Cloud, Grid and P2P Systems (Globe 2012), Wien, Austria, September 2012.
177. F. Marozzo, F. Lordan, R. Rafanell, D. Lezzi, D. Talia, R. Badia, "Enabling cloud interoperability with COMPSs". Proc. of the 18th International European Conference on Parallel and Distributed (EuroPar 2012), Rhodes Island, Greece, vol. 7484, pp. 16-27, Lecture Notes in Computer Science, August 2012. ISBN 978-3-642-32819-0.
178. F. Marozzo, D. Talia, P. Trunfio, "Using Clouds for Scalable Knowledge Discovery Applications". Euro-Par Workshops, Rhodes Island, Greece, Lecture Notes in Computer Science, vol. 7640, pp. 220-227, August 2012. ISBN: 978-3-642-36949-0.
179. E. Cesario, D. Talia, "Fault-Tolerant Distributed Knowledge Discovery Services for Grids". Proc. of the Sixth International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS 2012), Palermo, Italy, pp. 1036-1041, IEEE, 2012.
180. E. Cesario, M. Esposito, G. De Pietro, D. Talia, "A Consistency Checker for Verifying the Knowledge Encoded into Clinical DSSs". In Proc. of the 25th IEEE International Symposium on Computer-Based Medical Systems (CBMS 2012), Rome, Italy, pp. 1-6, IEEE, 2012.
181. E. Cesario, M. Esposito, G. De Pietro, D. Talia, "Verification of clinical guidelines encoded into knowledge-based DSSs". In Proc. of the 6th IEEE International Conference on Intelligent Systems (IS 2012), Sofia, Bulgaria, pp. 264-269, IEEE, 2012.
182. C. Comito, D. Falcone, D. Talia, P. Trunfio, "Energy Efficient Task Allocation over Mobile Networks". Proc. of the 9th IEEE International Conference on Dependable, Autonomic and Secure Computing (DASC 2011), Sydney, Australia, pp. 380-387, IEEE Computer Society Press, December 2011. ISBN 978-1-4673-0006-3.
183. C. Comito, D. Falcone, D. Talia, P. Trunfio, "Energy Efficient Task Allocation over Mobile Networks". Proc. of the International Conference on Cloud and Green Computing (CGC 2011), Sydney, Australia, pp. 380-387, IEEE Computer Society Press, December 2011.
184. F. Marozzo, D. Talia, P. Trunfio, "A Cloud Framework for Parameter Sweeping Data Mining Applications". Proc. of the 3rd IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2011), Athens, Greece, pp. 367-374, IEEE Computer Society Press, December 2011.
185. C. Comito, D. Talia, P. Trunfio, "An Energy-Aware Clustering Scheme for Mobile Applications". Proc. of the 11th IEEE International Conference on Scalable Computing and Communications (ScalCom 2011), Paphos, Cyprus, pp. 15-22, IEEE Computer Society Press, August 2011.
186. E. Cesario, A. Grillo, C. Mastroianni, D. Talia, "A Sketch-based Architecture for Mining Frequent Items and Itemsets from Distributed Data Streams". Proc. of the 11th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid 2011), Newport Beach, CA, USA, pp. 245-253, May 2011.
187. F. Marozzo, D. Talia, P. Trunfio, "A Framework for Managing MapReduce Applications in Dynamic Distributed Environments". Proceedings of the 19th Euromicro International Conference on Parallel, Distributed and Network-Based Computing (PDP 2011), Ayia Napa, Cyprus, pp. 149-158, IEEE Computer Society Press, February 2011.

188. E. Cesario, D. Talia, "A Failure Handling Framework for Distributed Data Mining Services on the Grid". Proceedings of the 19th Euromicro International Conference on Parallel, Distributed and Network-Based Computing (PDP 2011), Ayia Napa, Cyprus, pp. 70-79, IEEE Computer Society Press, February 2011.
189. M. Lackovic, D. Talia, R. Tolosana-Calasanz, J. Banares, O. Rana, "A Taxonomy For the Analysis of Scientific Workflow Faults". Proc. of the 2nd International Workshop on Workflow Management in Service and Cloud Computing (WMSC2010), in conjunction with CSE 2010, Hong Kong, pp. 398-403, December 2010.
190. C. Comito, D. Talia, P. Trunfio, "Selectivity-based XML query processing in structured peer-to-peer networks". Proc. Int. Database Engineering and Applications Symposium (IDEAS 2010), Montreal, Canada, pp. 236-244, August 2010.
191. D. Talia, "Distributed Data Mining Tasks and Patterns as Services", Proc. Euro-Par Workshops 2008, LNCS 5415, pp. 405-412, 2009.
192. C. Mastroianni, G. Pirrò, D. Talia, "A Hybrid Architecture for Content Consistency and Peer Synchronization in Cooperative P2P Environments". Proc. of Infoscale 2008, the third International ICST Conference on Scalable Information Systems, Vico Equense, Italy, June 2008.
193. G. Pirrò, M. Ruffolo, D. Talia, "Advanced Semantic Search and Retrieval in a Collaborative Peer-to-Peer System". Proceedings of the HPDC 2008 Conference & Co-Located Workshops, Boston, Massachusset, USA, pp. X-X, ACM Press, June 2008.
194. D. Barbalace, P. Cozza, C. Mastroianni, D. Talia, "P2P-based Job Assignment for Public Resource Computing". Proc. of the 3rd CoreGRID Integration Workshop, Hersonissos, Greece, April 2008.
195. P. Trunfio, D. Talia, A. Ghodsi, S. Haridi, "Implementing Dynamic Querying Search in k-ary DHT-based Overlays". Proc. of the 3rd CoreGRID Integration Workshop, Hersonissos, Greece, pp. 253-264, April 2008.
196. G. Pirrò, M. Ruffolo, D. Talia, "An Algorithm for Discovering Ontology Mappings in P2P Systems". KES - Session on Advanced-Knowledge-based Systems, LNCS, Springer Verlag, 2008.
197. D. Talia, P. Trunfio, "How Distributed Data Mining Tasks can Thrive as Services on Grids". Proc. of National Science Foundation Symposium on Next Generation of Data Mining and Cyber-Enabled Discovery for Innovation (NGDM'07), Baltimore, USA, October 2007.
198. P. Cozza, C. Mastroianni, D. Talia, I. Taylor, "A Super-Peer Protocol for Multiple Job Submission on a Grid". Euro-Par 2006 Workshops, Dresden, Germany, LNCS, vol. 4375, pp. 116-125, Springer Berlin/Heidelberg, June 2007.
199. C. Mastroianni, G. Pirrò, D. Talia, "Data Consistency in a P2P Knowledge Management Platform". Proceedings of UPGRADE-CN '07, Monterey, California, USA, pp. 17-24, ACM Press, June 2007.
200. E. Cesario, D. Talia, "From Parallel Data Mining to Grid enabled Distributed Knowledge Discovery". Proc. of the 18th International Conference on Rough Sets, Fuzzy Sets, Data Mining and Granular Computing (RSFDGrC'07), Toronto, Canada, LNAI, vol. 4482, pp. 25-36, Springer, May 2007.
201. A. Gounaris, C. Comito, R. Sakellariou, D. Talia, "A Service-Oriented System to Support Data Integration on Data Grids". Proceedings of Seventh IEEE International Symposium on Cluster Computing and the Grid (CCGrid 2007), Rio de Janeiro, Brazil, IEEE Computer Society, May 2007.
202. A. Congiusta, D. Talia, P. Trunfio, "Open Source in Grid Computing: Current State and Perspectives". Proc. of the Italian Conference on Free Software 2007, Rende (Cosenza), Italy, pp. 230-239, May 2007.
203. C. Mastroianni, D. Talia, O. Verta, "Evaluating Resource Discovery Protocols for Hierarchical and Super-Peer Grid Information Systems". Proc. of the 15th EUROMICRO International Conference on Parallel, Distributed and Network-Based Processing (PDP'07), Naples, Italy, pp. 147-154, IEEE Computer Society, February 2007.
204. G. Pirrò, D. Talia, "An approach to Ontology Mapping based on the Lucene search engine library". Proc. of the 1st International DEXA Workshop on Semantic Web Architectures For Enterprises, pp. 407-411, IEEE, 2007.
205. G. Pirrò, D. Talia, "UFOME: A User Friendly Ontology Mapping Environment". Proc. of the 4th Italian SWAP Workshop on Semantic Web Applications and Perspectives, CEUR-WS, 2007.
206. E. Le Coche, C. Mastroianni, G. Pirrò, M. Ruffolo, D. Talia, "A Peer-to-Peer Virtual Office for Organizational Knowledge Management". Proc. of the 6th International Conference on Practical Aspects of Knowledge Management (PAKM 2006), Vienna, Austria, LNCS, vol. 4333, pp. 166-177, Springer-Verlag, November 2006.

207. D. Talia, P. Trunfio, J. Zeng, M. Höggqvist, "A Peer-to-Peer Framework for Resource Discovery in Large-scale Grids". Proc. of the 2nd CoreGRID Integration Workshop, Cracow, Poland, pp. 249-260, October 2006.
208. D. Talia, P. Trunfio, J. Zeng, "Peer-to-Peer Models for Resource Discovery in Large-scale Grids: A Scalable Architecture". Proc. of the 7th International Conference on High Performance Computing in Computational Sciences (Vecpar 2006) - Revised Selected Papers, Rio de Janeiro, Brazil, LNCS, vol. 4395, pp. 66-78, Springer, July 2006.
209. M. Cannataro, D. Talia, G. Tradigo, P. Trunfio, P. Veltri, G. Zarola, "A Peer-to-Peer Infrastructure for Sharing Electronic Patient Records". Proc. of the Workshop on the Use of P2P, GRID and Agents for the Development of Content Distribution Networks (UPGRADE-CDN 2006), Paris, France, pp. 48-53, June 2006.
210. M. Cannataro, D. Talia, G. Tradigo, P. Trunfio, P. Veltri, G. Zarola, "Querying XML-based Electronic Patient Records in a Peer-to-Peer Environment". Proc. of the 14th Italian Symposium on Advanced Database Systems (SEBD 2006), Portonovo (Ancona), Italy, pp. 361-372, June 2006.
211. C. Comito, D. Talia, "Grid Data Integration based on Schema-Mapping". Workshop on State-of-the-Art in Scientific and Parallel Computing, PARA '06, Umea, LNCS, Springer Verlag, June 2006.
212. G. Pirrò, M. Ruffolo, D. Talia, "K-link: A Peer-to-Peer Solution for Organizational Knowledge Management". Proc. of the Fifth International Workshop on Agents and Peer-to-Peer Computing (AP2PC 2006), Hakodate, Japan, LNAI, pp. 86-97, Springer-Verlag, May 2006.
213. D. Talia, P. Trunfio, O. Verta, "WSRF Services for Composing Distributed Data Mining Applications on Grids: Functionality and Performance". Proc. of the International Conference on Computational Science and its Applications (ICCSA 2006), Glasgow, UK, LNCS, vol. 3980, pp. 1080-1089, Springer, May 2006.
214. M. Cannataro, C. Comito, A. Congiusta, G. Folino, C. Mastroianni, A. Pugliese, G. Spezzano, D. Talia, P. Veltri, "A general architecture for Grid-based PSE toolkits". International Workshop on State-of-the-Art in Scientific Computing (PARA'04), Berlin/Heidelberg, LNCS, vol. 3732, pp. 656-664, Springer-Verlag, 2006.
215. C. Comito, S. Patarin, D. Talia, "A Semantic Overlay Network for P2P Schema-Based Data Integration.". ISCC, pp. 88-94, IEEE Computer Society, 2006.
216. C. Comito, A. Gounaris, R. Sakellariou, D. Talia, "Data integration and query reformulation in service-based Grids". Proc. of the 1st CoreGRID Integration Workshop, Pisa, Italy, November 2005.
217. D. Talia, P. Trunfio, O. Verta, "Weka4WS: A WSRF-Enabled Weka Toolkit for Distributed Data Mining on Grids". Proc. of the 9th European Conference on Principles and Practice of Knowledge Discovery in Databases (PKDD 2005), Porto, Portugal, LNAI, vol. 3721, pp. 309-320, Springer, October 2005.
218. C. Comito, D. Talia, "XML Data Integration in OGSA Grids". Proc. VLDB Workshop on Data Management in Grids (DMG'05), Trondheim, LNCS, September 2005.
219. A. Congiusta, G. Greco, A. Guzzo, G. Manco, L. Pontieri, D. Saccà, D. Talia, "A Data Mining-based Framework for Grid Workflow Management". Proc. Int. Workshop on Grid and Peer-to-Peer based Workflows, Melbourne, Australia, pp. 349- 356, IEEE Computer Society Press, September 2005.
220. C. Comito, C. Mastroianni, D. Talia, "A Metadata Model and Information System for the Management of Resources in a Grid-based PSE Toolkit". Proc. of the International Conference on High Performance Computing and Communications (HPCC 2005), Sorrento, Italy, LNCS, vol. 3726, pp. 672-683, Springer Verlag, September 2005.
221. D. Talia, C. Comito, S. Patarin, "PARIS: A Peer-to-Peer Architecture for Large-Scale Semantic Data Integration". Proc. of the 3rd Int. Workshop on Databases, Information Systems, and Peer-to-Peer Computing (DBISP2P 2005), Trondheim, Norway, August 2005.
222. C. Mastroianni, D. Talia, O. Verta, "A P2P Approach for Membership Management and Resource Discovery in Grids". Proc. of the International Conference on Information Technology Coding and Computing (ITCC 2005), Las Vegas, USA, vol. 2, pp. 168-174, IEEE Computer Society Press, April 2005.
223. C. Mastroianni, D. Talia, O. Verta, "A Super-Peer Model for Building Resource Discovery Services in Grids: Design and Simulation Analysis". Advances in Grid Computing - EGC 2005, Amsterdam, The Netherlands, LNCS, vol. 3470, pp. 132-143, Springer Verlag, February 2005.
224. C. Comito, A. Gounaris, R. Sakellariou, D. Talia, "Data integration and query reformulation in service-based Grids: Architecture and Roadmap". The 1st CoreGRID Workshop on Knowledge and Data Management in Grids, Poznan, Poland, 2005.

225. D. Talia , P. Trunfio, "A P2P Grid Services-Based Protocol: Design and Evaluation", Proc. EuroPar 2004, Pisa, Springer-Verlag, LNCS vol. 3149, pp. 1022-1031, 2004.
226. A. Pugliese, D. Talia , "Application-Oriented Scheduling in the Knowledge Grid: A Model and Architecture", Proc. International Conference on Computational Science and its Applications (ICCSA), Assisi, Springer-Verlag, Vol. 2, pp. 55-65, April 2004.
227. C. Comito, C. Mastroianni, D. Talia, "Metadata Management in a Grid-based PSE Toolkit", Proceedings 2nd IST Workshop on Metadata Management in Grid and P2P Systems (MMGPS), London, December 2004.
228. A. Congiusta, C. Mastroianni, A. Pugliese, D. Talia, P. Trunfio, "Enabling knowledge discovery services on Grids". Grid Computing - Proc. 2nd European Across Grids Conference AxGrids 2004 - revised papers, Springer-Verlag, LNCS vol. 3165, pp. 250-259, 2004.
229. D. Talia , C. Comito, "GDIS: A Service-based Architecture for Data Integration on Grids", Proc. Conference OTM 2004, Cyprus, 2004, Springer Verlag, LNCS, pp. 88-98, 2004.
230. A. Congiusta, D. Talia, "Grid-Based Distributed Collaborative Environments for Applied Space Sciences". Proceedings 55th Intl. Astronautical Congress - IAC 2004, Vancouver, Canada, October, IAF, 2004.
231. M. Cannataro, C. Comito, A. Congiusta, G. Folino, C. Mastroianni, A. Pugliese, G. Spezzano, D. Talia, P. Veltri, "A General Architecture for Grid-based PSE Toolkits", Proc. International Workshop on State-of-the-Art in Scientific Computing (PARA'04), Copenhagen, LNCS, Springer-Verlag, 2004.
232. D. Talia, P. Trunfio, "Web Services for Peer-to-Peer Resource Discovery on the Grid", Proc. Sixth International Workshop of the EU Network of Excellence DELOS, S. Margherita di Pula, Italy, June, 2004.
233. G. Buetti, A. Congiusta, D. Talia, "Developing Distributed Data Mining Applications in the KNOWLEDGE GRID Framework", Proc. 6th International Meeting on High Performance Computing for Computational Science (VECPAR'04), vol.2, Valencia, 28-30 giugno, 2004.
234. A. Congiusta, D. Talia, P. Trunfio, "VEGA: A Visual Environment for Developing Complex Grid Applications Grid", Proceedings 1st Int. Workshop on Knowledge Grid and Grid Intelligence - KGGI 2003, Alifax, Canada, pp. 56-66, October 2003.
235. M. Cannataro, C. Mastroianni, D. Talia, P. Trunfio, "Evaluating and Enhancing the Use of the GridFTP Protocol for Efficient Data Transfer on the Grid", Recent Advances in Parallel Virtual Machine and Message Passing Interface - EuroPVM/MPI 2003, Springer-Verlag, LNCS 2840, pp. 619-628, October 2003.
236. D. Talia, "Knowledge Discovery Services and Tools on Grids", Foundation of Intelligent Systems - ISMIS 2003, Springer-Verlag, LNCS 2871, pp. 14-23, October 2003.
237. Cannataro M., Talia D., "Towards the Next-Generation Grid:A Pervasive Environment for Knowledge-Based Computing", Proc. Int. Conference on Information Technology: Computers and Communications, Las Vegas, Nevada, IEEE Computer Society, pp. 437-441, April 2003.
238. D. Talia, "Parallel Cellular Programming for Developing Massively Parallel Emergent Systems", Proceedings IPDPS 2003, IEEE Computer Society Press, April 2003.
239. C. Mastroianni, D. Talia, P. Trunfio, "Managing Heterogeneous Resources in Data Mining Applications on Grids Using XML-Based Metadata", Proceedings IPDPS 2003, IEEE Computer Society Press, April 2003.
240. M. Cannataro, D. Talia, P. Trunfio, "Design of Distributed Data Mining Applications on the KNOWLEDGE GRID", Proceedings NSF Workshop on Next Generation Data Mining, Baltimore, pp. 191-195, November 2002.
241. M. Cannataro, A. Congiusta, D. Talia, P. Trunfio, "A Data Mining Toolset for Distributed High-Performance Platforms", Proceedings 3rd Int. Conference Data Mining 2002, Bologna, WIT Press, pp. 41-50, September 2002.
242. D. Talia, "Parallelism in Knowledge Discovery Techniques", Proc. Sixth Int. Conference on Applied Parallel Computing, Helsinki, LNCS 2367, pp. 127-136, June 2002.
243. G. Manco, C. Pizzuti, D. Talia, "Eureka!: A Tool for Interactive Knowledge Discovery", Proc. 13th International Conf. on Database and Expert Systems Applications - DEXA 2002, Aix-en-Provence, France, LNCS 2453, pp. 381-391, September 2002.
244. P. Corsonello, G. Spezzano, G. Staino, D. Talia, "Efficient Implementation of Cellular Algorithms on Reconfigurable Hardware", Proc. of the 10th Euromicro Workshop on Parallel, Distributed and Network-based Processing (PDP 2002), Las Palmas, Spain, IEEE Computer Society Press, pp. 211-218, January 2002.

245. E. Maltseva, C. Pizzuti, D. Talia, "Visual data mining for defining tax-payer profiles", Proceedings of the International Workshop in Information retrieval IR'2001, Oulu, Finland, pp. 107-114, September 2001.
246. M. Cannataro, D. Talia, P. Trunfio, "KNOWLEDGE GRID : High Performance Knowledge Discovery Services on the Grid", Proceedings 2nd Int. Workshop GRID 2001, Denver, CO, LNCS 2242, Springer-Verlag, pp. 38-50, November 2001.
247. S. Basta, D. Talia, "Analysis of Communication Overhead in Parallel Clustering of Large Data Sets with P-AUTOCLASS" in Parallel Computing: Advances and Current Issues - Proceedings ParCo 2001, Imperial College Press, pp. 265-273, 2002.
248. W. Shi, A. Bouabdallah, P.K. Srimani, D. Talia, "Leader election in wrapped butterfly networks", in Parallel Computing: Advances and Current Issues - Proceedings ParCo 2001, Imperial College Press, pp. 382-389, 2002.
249. E. Masciari, C. Pizzuti, G. Raimondo, D. Talia, "Using an Out-of-Core Technique for Clustering Large Data Sets", Proceedings DEXA 2001 Workshops, IEEE Computer Society Press, pp. 133-137, Munich, September 2001.
250. R. Bosco, G. Manco, C. Pizzuti, D. Talia, "Data Mining per il Monitoraggio del Territorio: Il Caso di Studio del Piano Telematico Calabria", Proceedings AICA 2001, Como, September 2001.
251. D. Talia, "Implementing Standard and Nonstandard Parallel Cellular Automata in CARPET", Proc. of the 9th Euromicro Workshop on Parallel and Distributed Processing (PDP 2001), Mantova, Italy, IEEE Computer Society Press, pp. 243-249, February 2001.
252. D. Talia, "Modeling Emergent Dynamical Systems on Parallel Computers Using Cellular Automata", Proc. Int. Symposium on Adaptive Systems - ISAS 2001, Cuba, pp. 32-26, March 2001.
253. M. Cannataro, D. Talia, "Parallel and Distributed Knowledge Discovery on the Grid: A Reference Architecture", Proc. of the 4th International Conference on Algorithms and Architectures for Parallel Computing (ICA3PP), Hong Kong, World Scientific Publ., pp. 662-673, December 2000.
254. E. Maltseva, C. Pizzuti, D. Talia, "Una Metodologia di Data Mining per la Scoperta di Conoscenza in Dati Multidimensionali", Proc. XXXVII Congresso Annuale AICA, pp. 273-283, Taormina, September 2000.
255. D. Foti, D. Lipari, C. Pizzuti, D. Talia, "Scalable Parallel Clustering for Data Mining on Multicomputers", Proc. of the 3rd Int. Workshop on High Performance Data Mining HPDM00-IPDPS, LNCS, Springer-Verlag, pp. 390-398, Cancun, Mexico, May 2000.
256. D. Talia, "Solving Problems on Parallel Computers by Cellular Programming", Proc. of the 3rd Int. Workshop on Bio-Inspired Solutions to Parallel Processing Problems BioSP3-IPDPS, LNCS, Springer-Verlag, pp. 595-603, Cancun, Mexico, May 2000.
257. E. Maltseva, C. Pizzuti, D. Talia, "Undirect Knowledge Discovery by Using Singular Value Decomposition ", Proc. Second International Conference on Data Mining 2000, WIT Press, Cambridge, July 2000.
258. C. Pizzuti, D. Talia, G. Vonella, "A Divisive Initialization Method for Clustering Algorithms", Proc. PKDD'99 - Third Europ. Conf. on Principles and Practice of Data Mining and Knowledge Discovery, Lecture Notes in Artificial Intelligence, vol. 1704, Springer-Verlag, pp. 484-491, Prague, Sept. 1999.
259. D. Talia, "Recent Advances in Parallel Programming Languages and Tools", in Advances in Intelligent Systems and Computer Science, N. Mastorakis (Ed.), WSES Press, pp. 26-34, 1999. Also in Proc. of 3rd IEEE/IMACS Multiconference on Circuits, Systems, Communications & Computers (CSCC'99), WSES Press, pp. 34-42, July 1999. (plenary lecture)
260. D. Talia, "Esplicitazione del Parallelismo nelle Tecniche di Data Mining", Settimo Convegno Nazionale su Sistemi Evoluti per Basi di Dati - SEBD'99, pp. 387-401, Como, 23-25 Giugno 1999.
261. G. Spezzano, D. Talia, "Language Constructs and Run-time System for Parallel Cellular Programming", Proc. of Euro-Par'98 Parallel Processing, LNCS 1470, Springer-Verlag, pp. 669-675, August 1998.
262. G. Folino, G. Spezzano, D. Talia, "Evaluating and Modeling Communication Overhead of MPI Primitives on the Meiko CS-2", Recent Advances in Parallel Virtual Machine and Message Passing Interface - Proc. of EuroPVM/MPI98, LNCS 1497, Springer-Verlag, pp. 27-35, September 1998.
263. D. Talia, "Parallel Cellular Automata for High Performance Computational Simulation", Proc. of the High-Performance Computing Conference - HPC'98, SCS Press, USA, pp. 27-32, 1998.
264. G. Folino, G. Spezzano, D. Talia, "Performance Evaluation and Modeling of MPI Communications on the Meiko CS-2", Proc. of HPCN Europe '98, LNCS 1401, Springer-Verlag, pp.932-936, April 1998.

265. D. Talia, "Cellular Automata + Parallel Computing = Computational Simulation ", Proc. 15th IMACS World Congress on Scientific Computation, Modelling and Applied Mathematics, vol. 6, pp.409-414, Wissenschaft&Technik Verlag, Berlin, August 1997.
266. G. Spezzano, D. Talia, "A High-Level Cellular Programming Model for Massively Parallel Processing", Proc. of the 2nd Int. Workshop on High-Level Programming Models and Supportive Environments HIPS'97, IEEE Computer Society Press, pp. 55-63, April 1997.
267. G. Spezzano, D. Talia, "Programming High Performance Models of Soil Contamination by a Cellular Automata Language", Proc. of HPCN Europe '97, LNCS, Springer-Verlag, pp. 531-540, April 1997.
268. S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "A Parallel Cellular Simulator for Bioremediation of Contaminated Soils", in Development and Applications of Computer Techniques to Environmental Studies VI, Computational Mechanics Publications, C.A. Brebbia et al. (Eds.), pp. 685-695, 1996.
269. G. Spezzano, D. Talia, "A High-Level Language for Programming Cellular Algorithms on Parallel Machines", ACRI '96 - Proc. 2nd Conference on Cellular Automata for Research and Industry, S. Bandini and G. Mauri (Eds.), Springer-Verlag, pp. 187-196, London, 1997.
270. Gregorio S., Rongo R., Serra R., Spataro W., Spezzano G., Talia D., Villani M. "Parallel Simulation of Soil Contamination by Cellular Automata", Proc. PARCELLA'96 Seventh International Workshop on Parallel Processing by Cellular Automata and Arrays, Akademie Verlag, Mathematical Research series, vol. 96, pp. 295-297, Berlin, 1996.
271. S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "A Parallel Cellular Environment for High Performance Scientific Computing", Proc. HPCN Europe 1996, H. Lindell et al. (eds.), LNCS 1067, Springer-Verlag, pp. 514-521, 1996.
272. G. Spezzano, D. Talia, "CARPET: A Programming Language for Parallel Cellular Processing", Proc. 2nd European School on Parallel Programming Environments for HPC '96, pp. 71-74, Alpe d'Huez, France, April 1996.
273. S. Di Gregorio, D.C. Festa, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "A Microscopic Freeway Traffic Simulator on a Highly Parallel System", in Parallel Computing: State-of-the-Art and Perspectives, E. D'Hollander et al, eds., pp. 69-76, Elsevier, Amsterdam, 1996.
274. G. Spezzano, D. Talia, "Implicit Parallelism Models: Logic Programming", in General Purpose Parallel Computers, G. Balbo and M. Vanneschi, eds., pp. 251-266, Edizioni ETS, Pisa, 1995.
275. S. Di Gregorio, F. Nicoletta, R. Rongo, M. Sorriso-Valvo, G. Spezzano, D. Talia, "Landslide Simulation by Cellular Automata in a Parallel Environment", Proc. 2nd Int. Workshop on Massive Parallelism, Capri, pp. 392-407, World Scientific, 1994.
276. M. Cannataro, S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "A Parallel Cellular Automata Environment for Modeling Complex Systems", Proceedings ICANN '94 International Conference on Artificial Neural Networks, Springer-Verlag, May 1994.
277. M. Cannataro, G. Spezzano, D. Talia, "PNS : A Load Balancing Algorithm for Massively Parallel Systems", Proc. IFIP Conference on Programming Environments for Massively Parallel Distributed Systems, Birkhaeuser Verlag, April 1994.
278. A. Candelieri, M. Cannataro, G. Spezzano, D. Talia, "Esecuzione Efficiente di Programmi Logici Paralleli nel Sistema PALM", Atti del Congresso Annuale AICA'94, Palermo, September 1994.
279. S. Di Gregorio, G. Spezzano, D. Talia, "CAMEL: A Parallel Cellular Environment for Interactive Simulation", Proc. Convegno ACRI'94, Rende, Italy, September 1994.
280. Cannataro M., Sergejev Ya. D., Spezzano G., Talia D., "A Dynamic Load Balancing Strategy for Massively Parallel Computers", in A. Bode, M. Reeve, and G. Wolfe (Eds.), PARLE '93 Parallel Architectures and Languages and Europe, LNCS 694, pp. 664-667, Springer-Verlag, June 1993.
281. Cannataro M., Spezzano G., Talia D., "PALM: Parallel Implementation of Logic Programs", in Models and Tools for Massively Parallel Architectures, CNR, pp. 117-128, June 1993.
282. M. Cannataro, S. Di Gregorio, R. Rongo, W. Spataro, G. Spezzano, D. Talia, "CAMEL : A Cellular Automata Environment on a Highly Parallel Computer", Proc. of the International Section of AICA'93, pp. 143-158, 1993.
283. Cannataro M., Spezzano G., Talia D., "A Parallel Architecture for the Implementation of a Distributed Inference Engine", in Parallel Computing: Problems, Methods and Application, P. Messina & A. Murli (Eds.), Elsevier, pp. 415-425, 1992.
284. Cannataro M., Spezzano G., Talia D., "Esecuzione Parallela di Programmi Logici su Architetture a Memoria Distribuita", Atti del Workshop Elaborazione Parallela: Ricerca ed Applicazioni, AICA, pp. 385-399, Rome, Feb. 1992.

285. Cannataro M., Spezzano G., Talia D., "Adaptive Deadlock-Free Message Routing in Multicomputer Networks", in *Parallel Computing: From Theory to Sound Practice*, W. Joosen and E. Milgrom (Eds.), IOS Press, pp. 592, 1992.
286. Talia D., "Message Routing Systems for Transputer Based Parallel Computers", in *Transputer Systems - Ongoing Research*, A.R. Allen (Ed.), IOS Press, Amsterdam, pp. 1-12, April 1992.
287. Cannataro M., Sergejev Ya. D., Spezzano G., Talia D., "Dynamic Process Scheduling in a Parallel Logic Machine", *Proc. of the JICSLP '92 Joint Workshop on Distributed and Parallel Implementations of Logic Programming Systems*, Washington D.C., pp. 22-31, November 1992.
288. Cannataro M., Spezzano G., Talia D., "PARADISE: a Parallel Architecture for a Distributed Inference Engine", *Proceedings of IEEE COMPEURO '91*, Bologna, pp. 26-30, May 1991.
289. Spezzano G., Talia D., "L'Uso di Strumenti Automatici per L'Estensione Concorrente di Linguaggi Sequenziali in Ambiente Unix", *Atti del Convegno Annuale Unix*, pp. 441-455, Milan, May 1991.
290. Baiardi F., Candelieri A., Di Bella D., Ricci L., Spezzano G., Talia D., "Strumenti per la Parallelizzazione di Programmi Logici: FIXUP, OPTIMA, e PALM", in *Sistemi Informatici e Calcolo Parallelo*, B. Fadini (Ed.), FrancoAngeli, pp. 139-148, Rome, 1991.
291. Cannataro M., Spezzano G., Talia D., "A Distributed Implementation of OR-Parallel Interpretation of Logic Programs", *Proceedings of the ILPS '91 Workshop on Implementation of Parallel Logic Programming Systems*, San Diego, CA, October 1991.
292. Cannataro M., Spezzano G., Talia D., "The Development of a Multi-Transputer Implementation of the AND/OR Process Model", in *Transputer Research and Applications 2*, J. Board Jr. (Ed.), IOS Press, Amsterdam, pp. 265-281, 1990.
293. Cannataro M., Spezzano G., Talia D., "A Highly Decentralized Architecture for the Parallel Execution of Logic Programs", in *Decentralized Systems*, M. Cosnard & C. Girault (Eds.), North-Holland, pp. 235-246, 1990.
294. Cannataro M., Spezzano G., Talia D., "Evaluation of Routing Algorithms for a Parallel Machine", in *Supercomputing Tools for Science and Engineering*, D. Laforenza & R. Perego (Eds.), FrancoAngeli, pp. 169-175, 1990.
295. Talia D., "Distributed Termination of Parallel Applications in the Occam 2 Language", *Proceedings of Conference on Parallel Computing in Engineering and Eng. Education*, UNESCO, Paris, pp. 261-265, October 1990.
296. Cannataro M., Spezzano G., Talia D., "Strumenti per la Programmazione Parallela: L'esperienza CRAI", *Atti del Convegno Unix al Castello*, Napoli, pp. 327-336, November 1990.
297. Aiello C., Serrelli C., Siciliano C., Talia D., "Prototipazione in Ambiente Unix: Studio di un Caso", *Atti del Convegno Unix al Castello*, Napoli, pp. 127-135, November 1990.
298. Gallizzi E., Cannataro M., Spezzano G., Talia D., "A Deadlock-Free Communication System for a Transputer Network", *Proceedings of 12th Occam User Group Meeting*, IOS Press, pp. 11-21, April 1990.
299. Spezzano G., Talia D., "The Design of Fault-Tolerant Distributed Software Using a Concurrent Language", *Proceedings of 12th International Conference on FTSD*, pp. 260-265, Prague, September 1989.
300. Cannataro M., Spezzano G., Talia D., "Valutazioni di Algoritmi di Routing per una Macchina Parallela Basata sul Transputer", *Atti del Convegno Annuale AICA'89*, AICA, vol.1, pp. 37-52, Trieste, October 1989.
301. Spezzano G., Talia D., "An Approach to Reliability in Distributed Programming", *Proceedings of the EUUG Autumn 89 Conference*, pp. 257-263, Vienna, September 1989.
302. Spezzano G., Talia D., "A Language Based Approach for Reliable Distributed Computing", *Proceedings of the Workshop on the Future Trends of Distributed Computing Systems*, IEEE CS Press, pp. 262-269, Hong Kong, September 1988.
303. Spezzano G., Talia D., Vanneschi M., "NERECO: An Environment for the Development of Distributed Software", *Proceedings of the EUUG Conference*, Dublin, pp. 153-167, September 1987.
304. Gaudenzi F., Pagano R., Spezzano G., Talia D., Vanneschi M., "NERECO: un Ambiente per lo Sviluppo di Programmi Distribuiti", *Atti del Convegno Annuale AICA'87*, AICA, Trento, vol. 1, pp. 95-110, September 1987.

Unrefereed Publications

305. A. Congiusta, D. Talia, P. Trunfio, "Service-Oriented Knowledge Discovery in Grids". Proc. of the Workshop on Grid Technologies for Knowledge-Based Industries and Businesses, co-located with IST 2006, Helsinki, Finland, November 2006.
306. A. Congiusta, D. Talia, P. Trunfio, "Design of Knowledge Discovery Services Using the WS-Resource Framework". Proc. of the 1st CoreGRID Integration Workshop, Pisa, Italy, pp. 11-20, November 2005.
307. D. Talia, H. Kargupta, P. Valduriez, R. Camacho, "Topic 5 - Parallel and Distributed Databases, Data Mining and Knowledge Discovery". Euro-Par'05, Lisbon, August 2005.
308. D. Talia, "Towards GRID Operating Systems: from GLinux to a GVM". Workshop on Network Centric Operating Systems, Brussels, March 2005.
309. D. Talia, "Scoperta di Conoscenza su Griglie", Sistemi & Impresa: Rivista di Tecnologia e Management, Vol. 50, n. 6, pp. 52-57, 2004.
310. D. Di Serafino, E. Houstis, P. Sloot, D. Talia, "Integrated Problem Solving Environments" (Introduction to a session), Proc. EuroPar 2004, Pisa, Springer-Verlag, LNCS vol. 3149, pp. 962-963, 2004.
311. D. Talia, "Grid-based Data Mining and the Knowledge Grid Framework", Proc. Workshop on Data Mining and Exploration Middleware for Distributed and Grid Computing, pp. 29-30, Univ. of Minnesota, September 2003.
312. B. Mitschang, D.B. Skillicorn, P. Bonnet, D. Talia, "Parallel and Distributed Databases, Data Mining and Knowledge Discovery" (Introduction to a session), Proc. Euro-Par 2003 - Parallel Processing, Lecture Notes in Computer Science, vol. 2790, Springer-Verlag, Berlin, pp. 309, August 2003.
313. D. Talia, "Parallel and Distributed Data Mining: from Multicomputers to Grids", Proc. ECML/PKDD 2003 Workshop on Parallel and Distributed Computing for Machine Learning, September 2003.
314. H. Kosch, D. Talia, D.B. Skillicorn, "Parallel and Distributed Databases, Data Mining and Knowledge Discovery" (Introduction to a session), Proc. Euro-Par 2002 - Parallel Processing, Lecture Notes in Computer Science, vol. 2400, Springer-Verlag, Berlin, pp. 319-320, August 2002.
315. C. Lee, S. Matsuoka, D. Talia, A. Sussman, N. Karonis, G. Allen, J. Saltz, "A Grid Programming Primer", Global Grid Forum 2, Washington D.C., July 2001.
316. D. Saccà, D. Talia, "OLAP e Data Mining in Ambienti Distribuiti", Workshop Sistemi Distribuiti e Architettura dei Dati, Quinta Conferenza Nazionale di Statistica, ISTAT, Rome, November 2000.
317. D. Talia, D.B. Skillicorn, "High-Performance Data Mining and Knowledge Discovery" (Introduction to a workshop), Proc. Euro-Par'99 - Parallel Processing, Lecture Notes in Computer Science, vol. 1685, Springer-Verlag, Berlin, pp. 1439-1440, August 1999.
318. D. Talia, "Laboratori Virtuali", Sapere, vol. 65, no. 2, pp. 51-61, 1999.
319. D. Talia, "Cellular Automata Thrive on Parallel Systems", Scientific Computing World, no. 42, pp. 21-22, October 1998.
320. D. Talia, "General-Purpose Practical Models for Parallel Computation", ACM Workshop on Strategic Directions in Computing Research, Cambridge, MA, U.S.A., June 1996. (invited paper)
321. D. Talia, "Survey and Comparison of PARLOG and Concurrent Prolog", SIGPLAN Notices, ACM Press, vol. 25, no. 1, pp. 33-42, January 1990.
322. D. Talia, "Notes on Termination of Occam Processes", SIGPLAN Notices, ACM Press, vol. 25, no. 9, pp. 17-24, September 1990.
323. D. Talia, Book review of "Strand: New Concepts in Parallel Programming", Science of Computer Programming, North-Holland, Amsterdam, vol. 15, no. 1, pp. 111-112, Nov. 1990.

January 2020

Domenico Talia

