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## **ACADEMIC POSITIONS**

- *Associate Professor of Computer Engineering* at the DIMES Department, University of Calabria, Rende, Italy (since March 2025).
- *Visiting Professor at the University of Cambridge*, Computer Laboratory, Cambridge, UK (June 2026).
- *Assistant Professor of Computer Engineering* at the DIMES Department, University of Calabria, Rende, Italy (June 2019 – February 2025).
- *Contract Professor of Computer Engineering* at the DIMES Department, University of Calabria, Rende, Italy (September 2014 – June 2019).
- *Research Technician of Computer Engineering* at the DIMES Department, University of Calabria, Rende, Italy (February 2013 – June 2019).
- *Visiting Researcher* at the Barcelona Supercomputing Center, Barcelona, Spain (September 2011 – February 2012).

## **OTHER POSITIONS**

- *Chief Technology Officer (CTO)* of DtoK Lab Srl, an academic spin-off of the University of Calabria (May 2014 - December 2021).
- *Founding Partner* of DtoK Lab Srl, an academic spin-off of the University of Calabria (May 2014 - present).

## **MEMBERSHIPS / PROFESSIONAL AFFILIATIONS**

- *IEEE Senior Member* (since April 2023)
- *ACM Professional Member* (since June 2022)

## **EDUCATION**

- *Ph.D. in Systems and Computer Engineering*, University of Calabria (January 2010 - January 2013).
- *Laurea Degree (B.Sc.+M.Sc.) in Computer Engineering*, University of Calabria (January 2006 - July 2009).

## **COURSES TAUGHT**

### **A.Y. 2025/2026:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.

- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.

**A.Y. 2024/2025:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Functional Programming for Big Data Processing*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2023/2024:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Advanced Edge Cloud computing systems*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2022/2023:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.

**A.Y. 2021/2022:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Functional Programming for Big Data Processing*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2020/2021:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Big Data Analysis: concepts, frameworks, and applications*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2019/2020:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.

- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Data Science: Methods, Processes and Applications*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2018/2019:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Models and Techniques for Big Data*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Big Data Analysis on HPC and Clouds*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2017/2018:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.
- *Advanced Systems and Architectures for Data Management*, Management and Conservation of Digital Documents, University of Calabria.
- *Scalable Techniques for Big Data Analysis*, PhD in Information and Communication Technologies (ICT), University of Calabria.

**A.Y. 2016/2017:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.

**A.Y. 2016/2017:**

- *Operating Systems*, Computer Engineering, University of Calabria.
- *Computer Networks*, Computer Engineering, University of Calabria.

**A.Y. 2015/2016:**

- *Operating Systems*, Computer Engineering, University of Calabria.

**THESIS SUPERVISOR**

- Supervised 112 *Bachelor's Degree students* in Computer Engineering.
- Supervised 37 *Master's Degree students* in Computer Engineering.
- Supervised 2 *Bachelor's Degree students* in Engineering Management.
- Supervised 3 *PhD students* in Information and Communication Technologies (ICT).

**RESEARCH TOPICS**

In this section, I provide an overview of my main research topics, each accompanied by a brief description and an example of my contributions in the field. My work spans several domains, including Big Data, Machine Learning, Large Language Models (LLMs), High Performance Computing (HPC), and Cloud/Edge Computing. Each section highlights a specific focus area and includes a key research paper that exemplifies my efforts and advancements in that domain.

1. **Big Data:** My research has focused on the development and comparison of scalable tools for Big Data analysis. In particular, my work in the paper "*Programming Big Data Analysis: Principles and Solutions*" explores programming models such as MapReduce and their implementation in systems like Spark and Hadoop. This research guides developers in selecting the best solutions based on system capabilities and application needs.
2. **Machine Learning:** I have applied machine learning techniques to a variety of fields, from optimizing data partitioning in HPC applications to analyzing social media conversations. My work includes developing semi-supervised approaches to detect false information online, as demonstrated in papers like *Unmasking Deception: A Topic-Oriented Multimodal Approach to Uncover False Information on Social Media*.
3. **Large Language Models (LLMs):** In my research on LLMs, I have explored the use of models like BERT and GPT for enhanced review classification. In the paper *Exploiting Large Language Models for Enhanced Review Classification Explanations through Interpretable and Multidimensional Analysis*, we developed a methodology that not only classifies reviews but also provides in-depth explanations by analyzing various dimensions such as sentiment, emotion, and topics. This approach improves the interpretability of classification results, offering more detailed insights compared to basic explanations provided by systems like ChatGPT.
4. **High Performance Computing (HPC):** My work in HPC includes the development of the ParSoDA-Py library, which boosts data analysis performance in distributed systems. I have also contributed to methodologies that enhance scalability and integration in HPC environments, as detailed in the paper *Block size estimation for data partitioning in HPC applications using machine learning techniques*.
5. **Cloud/Edge Computing:** My research on cloud and edge computing emphasizes the edge-cloud continuum, particularly for applications like urban mobility prediction. I have developed solutions to optimize the distribution of resources across IoT, edge, and cloud platforms, highlighted in my paper *Edge-cloud continuum solutions for urban mobility prediction and planning*.

## RESEARCH PROJECTS

- National Scientific Coordinator (Principal Investigator) of the PRIN 2022 project "INSIDER: INtelligent ServIce Deployment for advanced cloud-Edge integRation," grant no. 2022WWSCRR, CUP H53D23003670006 (total funded cost of €305,899), from 29-09-2023 to 28-09-2025.

- Participation in the PNRR project “National Research Center in High-Performance Computing, Big Data, and Quantum Computing,” identification code CN00000013, CUP H23C22000360005, National Recovery and Resilience Plan, Mission 4, Component 2, Investment 1.4, from 01-09-2022 to 31-08-2025.
- Participation in the PNRR project “RESearch and innovation on future Telecommunications systems and networks, to make Italy more smART” (RESTART), CUP C37G22000480001, Spoke 6 (COHERENT), from 02-05-2022 to 28-02-2026.
- Participation in the project “Tech4You - Technologies for climate change adaptation and quality of life improvement,” CUP H23C22000370006, Mission 4, Component 2, Investment 1.5, from 01-01-2023 to 31-12-2025.
- Task Leader in the H2020 project “eFlows4HPC – Enabling Dynamic and Intelligent Workflows in the Future EuroHPC Ecosystem,” funded by the European Commission (01 January 2021 – 11 April 2024).
- Participation in the H2020 project “ASPIDE - exAScale ProgramIng models for extreme Data procEssing,” funded by the European Commission (09 June 2018 – 13 September 2021).
- Participation in the European eInvoicing Project: implementation of the European electronic invoice within the Public Health area (1 October 2016 – 31 October 2017).
- Participation in the IC1305: Network for Sustainable Ultrascale Computing (NESUS), funded by the European Commission (2014 - 2018).
- Participation in the DICET – INMOTO project – Organization of Cultural Heritage for Smart Tourism and Real-Time Accessibility (OR.C.HE.S.T.R.A.), funded by the Ministry of Education, Universities and Research (2013 - 2015).
- Participation in the “Tra.Me: Transfer of innovative teaching methodologies for companies,” funded by the Ministry of Labor and Social Policies (29 May 2009 – 31 December 2009).

## PROFESSIONAL SERVICES

### Services as organizer, chair and board member

- Associate Editor of IEEE Transactions on Big Data
- Associate Editor of IEEE Access
- Associate Editor of Journal of Big Data (Springer)
- Associate Editor of SN Computer Science (Springer)
- Guest Associate Editor of Frontiers in Big Data
- Editor of Scalable Computing: Practice and Experience
- Review Editor of Frontiers in High Performance Computing
- Previously Associate Editor of the International Journal of Intelligent Systems Technologies and Applications (Inderscience)
- Previously Editor of the International Journal of Big Data Intelligence (Inderscience)
- Editor of the Handbook of Research on Architectural Trends in Service-Driven Computing Book (Emerging Architectural Trends in Service-Driven Computing)
- Member of Editorial Board of Big Data and Cognitive Computing (MDPI)

- Member of Editorial Board of Algorithms (MDPI)
- Member of Editorial Board of Applied Sciences (MDPI)
- Member of the Advisory Board of Heliyon (Elsevier)
- Member of the Topical Advisory Panel Application of Future Internet (MDPI)
- Member of the Topical Advisory Panel Application of Sensors (MDPI)
- Member of the Topical Advisory Panel Application of Applied Sciences (MDPI)
  
- Co-Chair of the Second International Workshop on Ultrascale Computing for Early Researchers (UCER 2017) in conjunction with the 17th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2017).
- Local organizer of the Second NESUS Winter School & PhD Symposium 2017, Pizzo, Italy, 20-23 February 2017.
- Co-Chair of the First International Workshop on Ultrascale Computing for Early Researchers (UCER 2016) in conjunction with the 16th International Conference on Algorithms and Architectures for Parallel Processing (ICA3PP 2016), Granada, Spain, 14-16 December 2016.
- Guest Editor of 2022 International Conference on Algorithms, Network and Computer Technology (ICANCT 2022), 26-27 November 2022.

### Keynote

- Keynote speaker of “21th International Conference on Informatics in Economy (IE 2022)” with the talk “Improving execution of data-intensive workflows through machine learning algorithms”, May 26, 2022

### Invited Lecture

- “Models and systems for scalable Big Data analysis”, 3rd NESUS Winter School and PhD Symposium on Data Science and Heterogeneous Computing, Zagreb, Croatia, January 22-25, 2018

### Prizes

- “Exploiting Large Language Models for Enhanced Review Classification Explanations through Interpretable and Multidimensional Analysis” won the “Best Student Paper Runner Up” at the 27th International Conference on Discovery Science 2024 (DS24), Pisa, Italy, October 2024.
- “Edge Computing Solutions for Distributed Machine Learning” won the “Best Student Paper Award” at the IEEE International Conference on Cloud and Big Data Computing (CBDCOM22), Falerna, Italy, September 2022.
- “Enabling dynamic and intelligent workflows for HPC, data analytics, and AI convergence” was selected as the “Fall 2023 Editor’s Choice” by the journal Future Generation Computer Systems (FGCS).
- Recognition as a member of the research project ASPIDE – “exAScale ProgramIng models for extreme Data procEssing.” The project, titled “Unified programming framework for large-scale data-intensive processing in the Exascale Era,” proposed by the University of Calabria

team, was acknowledged as innovative technology by the European Commission's Innovation Radar [\[Link\]](#)

- Winner of the Degree Award conferred by AICA (Italian Association for Informatics and Automatic Calculation) and Confindustria Innovative and Technological Services, under the patronage of the CRUI Foundation and with the participation of CINI (National Interuniversity Consortium for Informatics) and CNIT (National Interuniversity Consortium for Telecommunications), 2010 edition [\[Link\]](#)
- Winner of the competition for the best theses in Computer Engineering organized by Javaday Rome and the Computer Engineering Council of Roma Tre University, in collaboration with IBM Italy. The thesis work "*Peer-to-Peer Models for MapReduce Applications in Dynamic Cloud Environments*" received one of the three degree awards for the best master's theses in Computer Engineering [\[Link\]](#)
- Recognitions as the proposer of the innovation project "Scalable Data Analytics," which led to the creation of DtoK Lab S.r.l., an academic spin-off of the University of Calabria:
  - 1st place at Start Cup Calabria 2013, organized by the three Calabrian universities. Prize value: €15,000 in capital funding.
  - 3rd place in the ICT sector at the National Innovation Award (PNI), held in Genoa on October 31, 2013.
  - Special Bizspark Platinum Award granted by Microsoft Italy as part of the PNI 2013. Prize value: \$100,000 in cloud resources.

#### Program committee member

- IEEE International Conference on Big Data" [\[IEEE BigData 2026\]](#) [\[IEEE BigData 2025\]](#) [\[IEEE BigData 2024\]](#) [\[IEEE BigData 2023\]](#) [\[IEEE BigData 2022\]](#) [\[IEEE BigData 2021\]](#) [\[IEEE BigData 2020\]](#) [\[IEEE BigData 2019\]](#) [\[IEEE BigData 2018\]](#)
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining [\[KDD 2026\]](#)
- International Joint Conference on Artificial Intelligence [\[IJCAI 2025\]](#) [\[IJCAI 2024\]](#)
- IEEE International Conference on Data Mining [\[ICDM 2025\]](#)
- Pacific-Asia Conference on Knowledge Discovery and Data Mining [\[PAKDD 2026\]](#)
- IEEE/SBC International Symposium on. Computer Architecture and. High Performance Computing [\[SBAC-PAD 2024\]](#)
- IEEE International Conference on Pervasive Intelligence and Computing [\[PiCOM 2025\]](#) [\[PiCOM 2024\]](#)
- International International Conference on Discovery Science [\[DS 2025\]](#) [\[DS 2024\]](#)
- International Conference on Bioinformatics and Biomedicine [\[BIBM 2026\]](#) [\[BIBM 2025\]](#) [\[BIBM 2024\]](#)
- IEEE International Conference on Machine Learning and Applications [\[ICMLA 2023\]](#)
- International European Conference on Parallel and Distributed Computing [\[Europar 2024\]](#)
- IEEE International Conference on Cloud Computing Technology and Science [\[CloudCom 2023\]](#) [\[CloudCom 2022\]](#) [\[CloudCom 2020\]](#) [\[CloudCom 2019\]](#) [\[CloudCom 2018\]](#) [\[CloudCom 2017\]](#) [\[CloudCom 2016\]](#)

- Euromicro International Conference on Parallel, Distributed and network-based Processing [**PDP 2023**] [**PDP 2022**] [**PDP 2021**] [**PDP 2020**] [**PDP 2019**] [**PDP 2018**]
- IEEE International Conference on Networking, Sensing and Control [**ICNSC 2020**] [**ICNSC 2019**]
- IEEE 2018 International Congress on Big Data [**IEEE BigData Congress 2018**] [**IEEE BigData Congress 2019**]
- International workshop on the Convergence of Extreme Scale Computing and Big Data Analysis [**CEBDA 2019**] [**CEBDA 2018**]
- International Workshop on Theoretical Approaches to Performance Evaluation, Modeling and Simulation [**TAPEMS 2019**]
- International European Conference on Parallel and Distributed Computing [**Europar 2018**]
- IEEE International Conference on Distributed Computing Systems [**ICDCS 2018**]
- International workshop on the Convergence of Extreme Scale Computing and Big Data Analysis [**CEBDA 2018**]
- International Conference on Emerging Internet, Data & Web Technologies [**EIDWT 2018**]
- EAI International Conference on Smart Objects and Technologies for Social Good [**GOODTECHS 2017**]
- IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing [**CCGRID 2017**]
- International Workshop on Peer-to-Peer Architectures, Networks and Systems [**PANS 2017**].
- International Conference on Algorithms and Architectures for Parallel Processing [**ICA3PP 2016**] [ICA3PP 2014] [ICA3PP 2013]
- International Conference on Frontier of Computer Science and Technology [**FCST 2015**]
- IEEE International Conference on Pervasive Intelligence and Computing [**PICom 2014**]
- ACM Cloud and Autonomic Computing Conference [**CAC 2013**]

## PUBLICATIONS

### Books

1. D. Talia, P. Trunfio, F. Marozzo, L. Belcastro, R. Cantini, A. Orsino, *Programming Big Data Applications: Scalable Tools and Frameworks for Your Needs*, World Scientific, 2024. Note: ISBN: 978-1-80061-504-5.
2. D. Talia, F. Marozzo, *Review Papers in Big Data, Cloud-Based Data Analysis and Learning Systems*, 2023. Note: ISBN 978-3-0365-8000-5 (hardback); ISBN 978-3-0365-8001-2.
3. D. Talia, P. Trunfio, F. Marozzo, *Data Analysis in the Cloud: Models, Techniques and Applications*, Elsevier, 2015. Note: ISBN 978-0-12-802881-0.

### Papers in journals

1. L. Belcastro, R. Cantini, F. Marozzo, D. Talia, P. Trunfio, "Detecting mental disorder on social media: a ChatGPT-augmented explainable approach". **Online Social Networks and Media**, 2025.
2. R. Cantini, C. Cosentino, I. Kilanioti, F. Marozzo, D. Talia, "Unmasking Deception: A Topic-Oriented Multimodal Approach to Uncover False Information on Social Media". **Machine Learning**, vol. 114, n. 13, 2025.
3. R. Cantini, C. Cosentino, F. Marozzo, D. Talia, P. Trunfio, "Harnessing Prompt-based Large Language Models for Disaster Monitoring and Automated Reporting from Social Media Feedback". **Online Social Networks and Media**, vol. 45, pp. 100295, 2025.
4. R. Cantini, F. Marozzo, A. Orsino, D. Talia, P. Trunfio, R. Badia, J. Ejarque, F. Vazquez-Novoa, "Block size estimation for data partitioning in HPC applications using machine learning techniques". **Journal of Big Data**, vol. 11, n. 19, 2024.
5. L. Belcastro, S. Giampà, F. Marozzo, D. Talia, P. Trunfio, R. Badia, J. Ejarque, N. Mammadli, "Boosting HPC Data Analysis Performance with the ParSoDA-Py Library". *Journal of Supercomputing (JoS)*, 2024.
6. R. Cantini, C. Cosentino, I. Kilanioti, F. Marozzo, D. Talia, "Unmasking Deception: A Topic-Oriented Multimodal Approach to Uncover False Information on Social Media". **Machine Learning**, 2024. Note: To appear.
7. L. Belcastro, F. Marozzo, A. Orsino, D. Talia, P. Trunfio, "Edge-cloud continuum solutions for urban mobility prediction and planning". **IEEE Access**, vol. 11, pp. 38864-38874, 2023.
8. F. Marozzo, D. Talia, "Perspectives on Big Data, Cloud-Based Data Analysis and Machine Learning Systems". *Big Data and Cognitive Computing*, vol. 7, n. 2, 2023.
9. L. Belcastro, D. Carbone, C. Cosentino, F. Marozzo, P. Trunfio, "Enhancing Cryptocurrency Price Forecasting: Integrating Machine Learning with Social Media and Market Data". *Algorithms*, n. 12, 2023.
10. R. Cantini, F. Marozzo, G. Bruno, P. Trunfio, "Learning sentence-to-hashtags semantic mapping for hashtag recommendation on microblogs". *ACM Transactions on Knowledge Discovery from Data (TKDD)*, vol. 16, n. 2, pp. 1-26, 2022.
11. L. Belcastro, R. Cantini, F. Marozzo, A. Orsino, D. Talia, P. Trunfio, "Programming Big Data Analysis: Principles and Solutions". **Journal of Big Data**, vol. 9, n. 4, 2022.
12. R. Cantini, F. Marozzo, D. Talia, P. Trunfio, "Analyzing Political Polarization on Social Media by Deleting Bot Spamming". *Big Data and Cognitive Computing*, vol. 1, n. 6, 2022.

13. L. Belcastro, R. Cantini, F. Marozzo, "Knowledge Discovery From Large Amounts Of Social Media Data". *Applied Sciences*, vol. 12, n. 3, 2022.
14. J. Ejarque, R. Badia, L. Albertin, G. Aloisio, E. Baglione, Y. Becerra, S. Boschert, J. Berlin, A. D'Anca, D. Elia, F. Exertier, S. Fiore, J. Flich, A. Folch, S. Gibbons, N. Koldunov, F. Lordan, S. Lorito, F. Lovholt, J. Macias, F. Marozzo, A. Michelini, M. Monterrubio-Velasco, M. Pienkowska, J. De la Puente, A. Queralt, E. Quintana-Ortà-, J. Rodrà-guez, F. Romano, R. Rossi, J. Rybicki, M. Kupczyk, J. Selva, D. Talia, R. Tonini, P. Trunfio, M. Volpe, "Enabling Dynamic and Intelligent Workflows for HPC, Data Analytics, and AI Convergence". *Future Generation Computer Systems (FGCS)*, 2022.
15. L. Belcastro, F. Branda, R. Cantini, F. Marozzo, D. Talia, P. Trunfio, "Analyzing voter behavior on social media during the 2020 US presidential election campaign". *Social Network Analysis and Mining (SNAM)*, 2022.
16. L. Belcastro, M. Kechadi, F. Marozzo, L. Pastore, D. Talia, P. Trunfio, "Parallel extraction of Regions-of-Interest from social media data". *Concurrency and Computation: Practice and Experience (CCPE)*, vol. 33, n. 8, pp. e5638, 2021.
17. S. Giampà, L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "A data-aware scheduling strategy for executing large-scale distributed workflows". *IEEE Access*, vol. 9, pp. 47354-47364, 2021. Note: ISSN: 2169-3536.
18. R. Cantini, F. Marozzo, A. Orsino, D. Talia, P. Trunfio, "Exploiting Machine Learning For Improving In-memory Execution of Data-intensive Workflows on Parallel Machines". *Future Internet*, vol. 13, n. 5, 2021.
19. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, F. Branda, T. Palpanas, M. Imran, "Using Social Media for Sub-Event Detection during Disasters". *Journal of Big Data*, vol. 8, n. 79, 2021.
20. L. Belcastro, F. Marozzo, E. Perrella, "Automatic detection of user trajectories from social media posts". *Expert Systems with Applications (ESWA)*, vol. 186, pp. 115733, 2021
21. R. Cantini, F. Marozzo, S. Mazza, D. Talia, P. Trunfio, "A Weighted Artificial Bee Colony Algorithm for Influence Maximization". *Online Social Networks and Media (OSNEM)*, vol. 26, pp. 100167, 2021
22. D. Kimovski, R. Matha, G. Iuhasz, F. Marozzo, D. Petcu, R. Prodan, "Autotuning of exascale applications with anomalies detection". *Frontiers in Big Data*, vol. 4, pp. 101, 2021.
23. F. Marozzo, D. Talia, P. Trunfio, "A Sleep-and-Wake technique for reducing energy consumption in BitTorrent networks". *Concurrency and Computation: Practice and Experience (CCPE)*, vol. 32, n. 14, pp. e5723, 2020.
24. L. Belcastro, R. Cantini, F. Marozzo, D. Talia, P. Trunfio, "Learning Political Polarization on Social Media using Neural Networks". *IEEE Access*, vol. 8, n. 1, pp. 47177-47187, 2020
25. F. Branda, F. Marozzo, D. Talia, "Ticket Sales Prediction and Dynamic Pricing Strategies in Public Transport". *Big Data and Cognitive Computing (BDCC)*, vol. 4, n. 4, 2020. Note: ISSN: 2504-2289.
26. L. Belcastro, F. Marozzo, D. Talia, P. Trunfio, "ParSoDA: High-Level Parallel Programming for Social Data Mining". *Social Network Analysis and Mining (SNAM)*, vol.9, n.1, 2019.
27. 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 (ACM TKDD)*, vol. 12, n. 3, pp. 27:1-27:22, January 2018.F.

- Marozzo, D. Talia, P. Trunfio, "A Workflow Management System for Scalable Data Mining on Clouds". *IEEE Transactions On Services Computing (TSC)*, vol. 11, n. 3, pp. 480-492, 2018. Note: ISSN: 1939-1374.
28. F. Marozzo, A. Bessi, "Analyzing Polarization of Social Media Users and News Sites during Political Campaigns". *Social Network Analysis and Mining (SNAM)*, vol. 8, n. 1, 2018.
  29. L. Belcastro, F. Marozzo, D. Talia, "Programming Models and Systems for Big Data Analysis". *International Journal of Parallel, Emergent and Distributed Systems*, 2018. Note: To appear.
  30. 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 (CCPE)*, vol. 29, n. 24, Wiley InterScience, December 2017. Note: ISSN: 1532-0634.
  31. F. Marozzo, A. Bessi, "Analyzing Polarization of Social Media Users and News Sites during Political Campaigns". *Social Network Analysis and Mining (OSNEM)*, vol. 8, n. 1, 2018.
  32. 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)*, vol. 28, n. 2, pp. 586-599, 2017. Note: ISSN:1045-9219
  33. L. Belcastro, F. Marozzo, P. Trunfio, "A Scalable Middleware for Context-aware Mobile Applications". *International Journal of Ad Hoc and Ubiquitous Computing (IJAHUC)*, 2017. Note: To appear.
  34. 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 (SUPE)*, 2016.
  35. 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)*, vol. 8, n. 1, October 2016.
  36. F. Marozzo, D. Talia, P. Trunfio, "A Workflow Management System for Scalable Data Mining on Clouds". *IEEE Transactions On Services Computing (IEEE TSC)*, 2016, Note: To appear.
  37. F. Marozzo, D. Talia, P. Trunfio, "JS4Cloud: Script-based Workflow Programming for Scalable Data Analysis on Cloud Platforms". *Concurrency and Computation: Practice and Experience (CCPE)*, vol. 27, n. 17, pp. 5214--5237, Wiley InterScience, December 2015.
  38. 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.
  39. 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.
  40. F. Marozzo, D. Talia, P. Trunfio, "P2P-MapReduce: Parallel data processing in dynamic Cloud environments". *Journal of Computer and System Sciences (JCSS)*, vol. 78, n. 5, pp. 1382--1402, Elsevier Science, September 2012.

### Book chapters

1. R. Cantini, F. Marozzo, A. Orsino, "Deep learning meets smart agriculture: using LSTM networks to handle anomalous and missing sensor data in the compute continuum". In: Device-Edge-Cloud Continuum - Paradigms, Architectures and Applications, pp. 141-153, 2024.
2. A. Orsino, R. Cantini, F. Marozzo, "Evaluating the performance of a multimodal speaker tracking system at the edge-to-cloud continuum". In: Device-Edge-Cloud Continuum - Paradigms, Architectures and Applications, pp. 155-166, 2024.
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5. F. Marozzo, D. Talia, P. Trunfio, "Enabling Reliable MapReduce Applications in Dynamic Cloud Infrastructures". ERCIM News, n. 83, pp. 44-45, October 2010

#### SCOPUS AND GOOGLE SCHOLAR INDEXES

- According to [Google Scholar](#) Fabrizio Marozzo's publications have received more than 3000 citations, with an H index of 31.
- According to the [SCOPUS database](#), the publications have received more than 1900 citations, with an H index of 25.

#### SCIENTIFIC QUALIFICATIONS

Italian National Scientific Qualification (ASN) for the position of Full Professor in the following academic discipline:

- **09/H1 – Computer Engineering** – obtained on 10/10/2022.

Rende (Italy), 11 June 2026

Fabrizio Marozzo