

# Pierluigi Plebani | CV

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I have been working as an Associate Professor at the Department of Electronics, Information, and Bioengineering at Politecnico di Milano since July 2020, where I also obtained my PhD in Information Engineering. My primary research interests lie in the broad field of Information Systems Engineering, encompassing Service-Oriented Computing (SOC), Business Process Management (BPM), and Blockchain. I explore these topics across various application domains, with a particular focus on healthcare and Industry 4.0.

As a result of my activities, I have published more than 100 papers (see <https://scholar.google.it/citations?user=FUdUWB4AAAAJ>, <https://dblp.org/pid/86/5594.html>, and <https://www.scopus.com/authid/detail.uri?authorId=22734593000> for a complete list), including 20 journal papers, several book chapters and about 60 peer-reviewed conference and workshop papers (including GGS A/A- Class 2 conferences CAiSE, ICSOC, ICWS). In 2017 I won the CAiSE Best paper award. My h-index is 25 on Google Scholar (total citations over 2700) and 17 on Scopus (total citations over 1400).

I will serve as Program Co-chair for CAiSE 2026 and previously held the same role for ESOCC 2018. Currently, I am a member of the program committee for several leading conferences in the field of information systems engineering, including ICSOC, CAiSE, and BPM. Additionally, I served two terms as Elected Chair for the IFIP WG 2.14/6.12/8.10 – Service-Oriented Systems.

As a reviewer, I contribute to many prestigious journals, such as TOSEM, TSE, TOIT, and JIS. Notably, I am on the Board of Distinguished Reviewers for TOSEM. Furthermore, I am an associate editor of the International Journal of Cooperative Information Systems.

My research activities have been conducted in collaboration with numerous international universities and institutions, including the Technical University of Berlin, the Technical University of Vienna, the University of Crete, and the IBM Research Labs in New York and Haifa. Nationally, I maintain strong relationships with Università La Sapienza, Università di Roma, and Politecnico di Torino.

I bring nearly 20 years of teaching experience across Bachelor's and Master's courses, as well as specialized courses for industry professionals. As of today, I have been the advisor of one PhD student (Giovanni Meroni) and currently the advisor of 2 PhD students (Matteo Falconi and Shudan Yang).

I raised funding for projects obtained through competitive tenders for more than 1.3M€. Among them, for the Horizon 2020 and Horizon Europe projects I was the proponent and responsible for writing the proposal as well as the scientific coordinator.

In addition, I also obtained funding from research contracts for around 35K€, teaching contracts for 12K€, and commercial contracts for 50K€.

I currently hold the Italian academic qualification as Full Professor for the 09/H1 sector (since July 2024).

## Previous Employment

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- **Dip. Elettronica ed Informazione** **Politecnico di Milano**  
*Assistant Professor* Jun 2008 – Jun 2020
- **Dip. Elettronica ed Informazione** **Politecnico di Milano**  
*Research Associate, Topic of the research “Searching and invocation of adaptive services in multichannel systems”*, position funded by FIRB-TEKNE project Dec 2006 – May 2008
- **Dip. Elettronica ed Informazione** **Politecnico di Milano**  
*Research Associate, Topic of the research “Advanced technologies for e-commerce”*, position funded by Italian government Mar 2005 – Nov 2006
- **Dip. Elettronica ed Informazione** **Politecnico di Milano**  
*Research Associate, Topic of the research “Searching and invocation of adaptive services in multichannel systems”*, position funded by FIRB-MAIS project Mar 2004 – Mar 2005
- **Local Public Administrations** **Italy**  
*IT consultant, “Information systems upgrade, re engineering of the internal processes, definition of calls for tender”* 1996 – 2003

## Education

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- **Politecnico di Milano** **Milan**  
*Ph.D. in Information Engineering, Major topic: Searching and Invoking e-Services in Multichannel Information Systems* May 2002 – May 2005
- **Politecnico di Milano** **Milan**  
*Laurea degree in Information Engineering* Sep 1994– Apr 2000

## International collaborations

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- **FORTH Institute, University of Crete** **Heraklion, Greece**  
*Visiting researcher* Sep 2008
- **Norwegian University of Science and Technology (NTNU)** **Trondheim, Norway**  
*Visiting researcher* May 2007– Jul. 2007
- **IBM Research Labs** **Hawthorne, NY, USA**  
*Internship* Jan 1994– Sep 1994

## Research interests

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### Trustworthy Data Sharing in Federated Environments.....

Data sharing necessitates the establishment of data governance policies that ensure secure access, storage compliant with existing regulations, and maintain efficiency in constructing and maintaining the technological infrastructure required for data sharing. For this reason, there is an increasing demand for solutions that guarantee data sovereignty, i.e., providing full control over data even when shared with other organizations, while being both effective and easy to adopt. This research focuses on developing new methods and tools to design and implement sovereignty-related policies in federated data lake environments. These solutions will leverage natural language processing (NLP) for design, enabling automatic translation into recipes understandable by cloud-native technologies for enactment in a data lake, and by blockchain platforms for observability in a federated setting.

*Active project:* EU-H2020 *TEADAL* (<http://www.teada1.eu>) [2022-2025] (Total funding 8.8M€). Main proponent and Scientific Coordinator - Responsible for the POLIMI Unit (657K€ funding)

#### *Selected publications*

- M. Falconi, G. Lombardo, P. Plebani, S. Werner: Data Friction: Physics-Inspired Metaphor to Evaluate the Technical Difficulties in Trustworthy Data Sharing. CAiSE 2024: 300-315
- P. Plebani, D. Rossetto, F. Tiezzi: Empowering trusted data sharing for data analytics in a federated environment: A blockchain-based approach. *Frontiers Blockchain* 6 (2023)

- o M. Falconi, P. Plebani: Adopting Data Mesh principles to Boost Data Sharing for Clinical Trials. ICDH 2023: 298-306
- o B. Sedlak, V. Casamayor-Pujol, P. Kumar Donta, S. Werner, K. Wolf, M. Falconi, F. Pallas, S. Dustdar, S. Tai, P. Plebani: Towards Serverless Data Exchange Within Federations. SummerSOC 2023: 144-153

### Multi-party Business Process Monitoring

Business processes increasingly leverage smart objects to execute tasks and they are particularly adopted in settings involving different organizations. This research explores the use of smart objects to design reliable business processes and ensure their accurate execution. Rather than using control-flow-based languages to define processes, we employ declarative approaches such as GSM (Guard Stage Milestone) and CMMN (Case Management Modeling Notation). Additionally, blockchain technology is being investigated as a shared platform to enhance trust among parties.

*Active project:* PE-PNRR *BOTQUAS* [2023-2025]

*Selected publications*

- o G. Quattrocchi, P. Plebani: Trustworthy Collaborative Business Intelligence Using Zero-Knowledge Proofs and Blockchains. CAiSE Forum 2024: 29-37
- o M. Bertolini, G. Meroni, P. Plebani: Trusted Compliance Checking on Blockchain with Commitments: A Model-Driven Approach. BPM (Forum) 2023: 3-19
- o A. Marrella, M. Mecella, B. Pernici, P. Plebani. A design-time data-centric maturity model for assessing resilience in multi-party business processes, Information Systems, vol. 86, pp. 62–78, Elsevier, 2019.
- o G. Meroni, L. Baresi, M. Montali, P. Plebani, *Multi-party Business Process Compliance Monitoring through IoT-enabled Artifacts*, in Information Systems, Volume 73, 2018, pp. 61–78, ISSN 0306-4379, Elsevier.

### Adaptive Service Oriented Architectures

Service-based applications (SBAs) are constructed on architectures where distributed capabilities are often managed by different ownership domains, such as in Service-Oriented Architectures (SOA). This research aims to support the design and execution of SBAs that can react to unavailability issues, such as failures in computing nodes or network disruptions. We have proposed an Enhanced Service Registry (URBE, UDDI Registry By Example) and a model for expressing quality of service properties in multi-channel systems.

*Past projects:*

- o MISE-Industria 2015 *Sensori* [2012-2014]
- o EU-FP7-NoE *SCUBE* [2008-2012]

*Selected publications*

- o E. Fadda, M. Vitali, P. Plebani. Monitoring-aware Optimal Deployment for Applications based on Microservices. Accepted for publication in IEEE Transactions on Services Computing, IEEE (2023).
- o P. Plebani, B. Pernici, “URBE: Web service Retrieval based on Similarity Evaluation”, IEEE Transaction on Knowledge and Data Engineering, 21(11): 1629-1642 (2009)

## Research projects

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### Responsibilities in funded projects

#### EU-HE TEADAL

*Trustworthy, Energy-Aware federated DATA Lakes along the computing continuum* (8.8M€ total funding, 657K€ POLIMI unit funding)

**Scientific coordinator**

**Responsible of POLIMI Unit**  
2022 – 2025

#### Fondazione CARIPO - LLC-Network

*Lombardia Long-COVID Network*  
(500k€ total funding, 99K€ POLIMI unit funding)

**Responsible of POLIMI Unit**  
2022 – 2024

**Health Ministry - HBD** **WP co-leader and Member of Executive Committee**  
*Health Big Data* 2020 – 2029

**EU-H2020 DITAS** **Scientific coordinator**  
*Data-intensive applications Improvement by moving daTA* **Responsible of POLIMI Unit**  
and computation in mixed cloud/fog environmentS 2017 – 2019  
(4.69M€ total funding, 542K€ POLIMI unit funding)

**CTN-ITS ITS2020** **WP co-leader**  
*Intelligent Transportation Systems* 2014 – 2018

**EU-FP7-NoE S-CUBE** **WP leader**  
*European Network of Excellence in Software Services and Systems* 2008 – 2012

**Participation in funded projects**.....

**EU-FP7-CSA KNOW-4-DRR** **Participant**  
*Enabling knowledge for disaster risk reduction in integration* 2013 – 2015  
*to climate change adaptation*

**MIUR-RL TORCIA** **Participant**  
*piTtafORma di gestione CollaboratlvA delle emergenze* 2012 – 2014

**EU-FP7-STREP Eco2Clouds** **Participant**  
*Experimental Awareness of CO2 in Federated Cloud* 2012 – 2014

**MISE-Industria2015 SeNSori** **Participant**  
*SEnsor Node as a Service for hOme and buildings eneRgy savlngs* 2011 – 2013

**EU-FP7-STREP GAMES** **Participant**  
*Green Active Management of Energy in IT Service centers* 2010 – 2012

**MIUR-FIRB TEKNE** **Participant**  
*Towards Evolving Knowledge-based interNetworked Enterprise* 2006 – 2011

**MIUR-FAR EasyLog** **Participant**  
*E-Adaptive service for Logistics* 2004 – 2007

**MIUR-FIRB MAIS** **Participant**  
*Multichannel Adaptive Information Systems* 2002 – 2006

**Editorial Board membership**.....

- o Associate Editor of Int'l Journal of Cooperative Information Systems
- o Member of the Board of Distinguished Reviewers of AMC Trans. on Software Engineering and Methodologies

**Organizational office and role**.....

- o Chair of IFIP Working Group on Service Oriented Systems (WG 2.14/6.12/8.10)
- o Steering Committee member of ESOC conference
- o Program Board member of CAiSE conference

**Reviews of project proposals**.....

- o Member of the Evaluation Panel for the EU-CHIST-ERA funding project 2018
- o Project review for The Netherlands Organisation for Scientific Research (NWO)
- o Project review for the Knowledge Foundation (KK-stiftelsen)-Sweden
- o Project review for the Provincia Autonoma di Trento-Italy

## **Awards**.....

- o CAiSE 2017 Best Paper Award
- o URBE (Ph.D. thesis result) selected as the best SAWSDL Matchmaker in Semantic Service Selection Contest in 2007
- o Chorafass award for the Ph.D. thesis 2005

## **Invited Talks**.....

- o FAiSE 2018 (Flexible Advanced Information Systems workshop @ CAISE) "Orienteering in the Fog: an Information Systems perspective". (planned for June 2018)
- o ESOC 2017 (European Conference on Service-Oriented and Cloud Computing) "Business Processes and Smart Devices - a marriage of convenience?"
- o ICGreen Conference 2015, "Reducing CO2 footprint of cloud-based applications: strategies and lessons learnt"

## **Ph.D. student supervision**.....

- o 2023-ongoing Matteo Falconi (topic: LLM-based Personalized Data Retrieval and Access in Federated Data Lakes)
- o 2023-ongoing Shudan Yang (topic: Context-aware privacy-preserved data sharing for data analytics in federated settings)
- o 2014-2017 Giovanni Meroni (topic: Artifact-Driven Business Process Monitoring) - For his thesis Giovanni won the Best Ph.D. Thesis award from CAiSE conference

## **Conference organization**.....

- o CAiSE 2019 Doctoral Consortium co-chair
- o ESOC 2018 (European Conference on Service-Oriented and Cloud Computing) **Program co-chair**
- o SOCA 2015 (Service Oriented Computing and Applications) Workshop Chair
- o CISIS 2011 (Int'l Conference on Complex, Intelligent, and Software Intensive Systems) Track co-chair
- o FIS (Future Internet Symposium) 2010 Demos and Posters co-chair
- o CAISE 2010 Workshop and Tutorial co-chair
- o Co-chair of EMSOA Workshop (Emergency Management through Service Oriented Architecture) Workshop held in conjunction with ServiceWave 2010
- o Co-organizer of IE4SOC (Industrial Experiences for Service Oriented Computing) Workshop held in conjunction with ICSOC/ServiceWave, 2009

## **Program Committee membership**.....

- o CAiSE (International Conference on Advanced Information Systems Engineering)
- o BPM (International Conference on Business Process Management - Engineering Track)
- o ICSOC (International Conference on Service Oriented Computing)
- o ESOC (European Conference on Service-Oriented and Cloud Computing)
- o SOCA (IEEE International Conference on Service Oriented Computing & Applications)
- o SMARTGREENS (International Conference on Smart Grids and Green IT Systems)
- o WEBIST (International Conference on Web Information Systems and Technologies)
- o ICGREEN (International Conference on Green IT Solutions)
- o ICSOC-Ph.D. Symposium
- o ICSOC-Demo sessions
- o and many workshops

## **Ph.D. evaluation committee membership**.....

- o 2020 – University of Tartu (Estonia), Ph.D. candidate Orlenys Lopez Pintado

- o 2014 – University of Thessaloniki (Greece), Ph.D. candidate Dionisys Athanasopoulos
- o 2010 – University of Trento (Italy), Ph.D. candidate Ganna Frankova
- o 2008 – University of Crete (Greece), Ph.D. candidate Kyriakos Kritikos

## Peer-review activity.....

- o Journals:
  - ACM TOSEM (Trans. on Software Engineering and Methodologies) - Member of the Board of Distinguished Reviewers
  - IEEE TSE (Trans. on Software Engineering)
  - IEEE TSC (Trans. on Services Computing)
  - ACM TOIT (Trans. on Internet Technology)
  - IEEE TPDS (Trans. on Parallel and Distributed Systems)
  - SPE (Software Practice and Experience), John Wiley
  - JIS (Journal Information Systems), Elsevier
  - SOCA (Service Oriented Computing and Applications), Springer
  - IBM System Journal
- o Conferences:
  - Int. Conference on World Wide Web (WWW)
  - Int. Conference on Advanced Information Systems Engineering (CAiSE)
  - Int. Conference on Web Engineering (ICWE)
  - IEEE Int. Conference on Web Services (ICWS)
  - IEEE European Conference on Web Services (ECOWS)
  - Int. Conference on Web Information System Engineering (WISE)
  - ACM SIG Symposium On Applied Computing (SAC)
- o Funding bodies:
  - Provincia Autonoma di Trento, Italy - Innovative projects
  - Netherlands Organisation for Scientific Research (NWO), The Netherlands - Research projects
  - Knowledge Foundation/KK-stiftelsen, Sweden - Research projects

## Tutorials and Panels.....

- o P. Plebani, M. Salnitri, M. Vitali, Tutorial on "Strategies for data and computation movements in fog computing", IEEE 27th International Requirements Engineering Conference (RE'19), South Korea, September 2019
- o Lecture on "Web service retrieval" at Semantic Web Services Winter Retreat, Seefeld, Austria, 2009
- o Lecture on "Quality of Web services" at International Summer School Chambery-Torino, Certosa di Collegno, Torino, 2006
- o Panel on "Quality of Service (QoS) Middleware for Web Services: Achieved Results and Challenges for the Future" at EDOC-MWS 2005 (Middleware for Web Services workshop in conjunction with the 9th International IEEE Enterprise Distributed Object Computing Conference)
- o L. Baresi, M. Matera, and P. Plebani Models and Technologies for Service Composition (issues and solutions). Presented at the 1st International Conference on Service-oriented Computing (ICSOC 2003). November, 2003, Trento, Italy.

## Teaching activities

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### Lecturer at Politecnico di Milano

Business Process Management (Ph.D. students (12 hours)) (4 editions)	2014 – present
Tecnologie Digitali (GES) 5 CFU (30 hours)	2020 – present
Sistemi Informativi per il Settore dell'Informazione (IOL) 5 CFU	2021 – present
Sistemi Informativi (GES) 10 CFU (60 hours)	2015 – 2020
Process and Service Design (INF) 5 CFU (50 hours)	2015 – present
Informatica A (ICA) 6 CFU (36 hours) - Polo di Lecco	2008 – 2010
Informatica A (ICA) 8 CFU (50 hours) - Polo di Lecco	2010 – 2015
Sistemi Informativi (GES+INF) 5 CFU (32 hours) - Polo di Cremona	2007 – 2015
Informatica (GES) 10 CFU (60 hours)	2005 – 2007
Progetto di Sistemi Informativi (INF) 2.5 CFU	2004 – 2006
Laboratorio di analisi dell'informazione e dei processi aziendali (GES) 10 CFU (60 hours)	2004 – 2005

### Lecturer at University of Lugano (CH)

Enterprise Resource Planning lab 3 ECTS (24 hours)	2020 – present
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### Lecturer at Università di Bergamo

Gestione dei Sistemi ICT 6 CFU (32 hours)	2021 – 2022
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### Teaching assistant at Politecnico di Milano

In the period 2001-2015 for the following courses at Politecnico di Milano:

- o Service technologies
- o Information Systems design
- o Information Technologies for e-Government
- o Computer Science Fundamentals

### Teaching for professional audience

<b>Program coordinator</b>	<b>Cefriel</b>
Cloud Data Architect (5 editions)	2020 – present
IT Master Program (for UBIS)	2017
<b>Corporate Education</b>	<b>Cefriel</b>
IT Solution Architect 4.0	2015 – 2017
JEE Architecture (for Atex Group)	2018
JEE Architecture (for Prisma Telecom)	2017
Java Web Service (for IW-Bank)	2005
J2EE EJB Fundamentals (for Fabbrica Digitale)	2005
<b>2<sup>nd</sup> level Master</b>	<b>Cefriel</b>
Cloud Computing and Agile Meth.-Module on Business Process Management	2017
Development of Innovative SW products-Module on Java Enterprise Edition	2017 - 2018
Analytics and Business Intelligence-Module on Business Process Management	2014 – 2015
Supporto Ciclo Vita IT-Module on Business Process Management	2014 – 2015

## Publications

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### Journals

- P. Plebani, S. Schulte, D. Andrew Tamburri, and S. Dustdar. Service-oriented computing: A trajectory for research to 2030. *IEEE Internet Comput.*, 28(3):59–63, 2024 (ranked as Q1 by Scimago).
- D. Bianchini, C. Bono, A. Campi, C. Cappiello, S. Ceri, F. De Luzi, M. Mecella, B. Pernici, and P. Plebani. Challenges in ai-supported process analysis in the italian judicial system: what after digitalization? *Digit. Gov. Res. Pract.*, 5(1):10:1–10:10, 2024 (ranked as Q2 by Scimago).
- G. Mangiaracina, P. Plebani, M. Salnitri, and M. Vitali. Efficient data as a service in fog computing: An adaptive multi-agent based approach. *IEEE Trans. Cloud Comput.*, 11(3):2646–2663, 2023 (ranked as Q1 by Scimago).
- P. Plebani, D. Rossetto, and F. Tiezzi. Empowering trusted data sharing for data analytics in a federated environment: A blockchain-based approach. *Frontiers in Blockchain*, 6:13, 2023.
- C. Di Ciccio, G. Meroni, and P. Plebani. On the adoption of blockchain for business process monitoring. *Software and Systems Modeling*, pages 1619–1374, 2022 (ranked as Q2 by Scimago).
- C. Cappiello, M. Comuzzi, P. Plebani, and M. Fim. Assessing and improving measurability of process performance indicators based on quality of logs. *Inf. Syst.*, 103:101874, 2022 (ranked as Q1 by Scimago).
- E. Fadda, P. Plebani, and M. Vitali. Monitoring-aware optimal deployment for applications based on microservices. *IEEE Trans. Serv. Comput.*, 14(6):1849–1863, 2021 (ranked as Q1 by Scimago).
- C. Cappiello, G. Meroni, B. Pernici, P. Plebani, M. Salnitri, M. Vitali, D. Trojaniello, I. Catallo, and A. Sanna. Improving health monitoring with adaptive data movement in fog computing. *Frontiers in Robotics and AI*, 7:96, 2020 (ranked as Q2 by Scimago).
- A. Marrella, M. Mecella, B. Pernici, and P. Plebani. A design-time data-centric maturity model for assessing resilience in multi-party business processes. *Information Systems*, 86:62–78, 2019 (ranked as Q1 by Scimago).
- G. Meroni, L. Baresi, M. Montali, and P. Plebani. Multi-party business process compliance monitoring through iot-enabled artifacts. *Information Systems*, 73:61–78, 2018 (ranked as Q1 by Scimago).
- C. Cappiello, N. T. T. Ho, B. Pernici, P. Plebani, and M. Vitali. CO<sub>2</sub>-Aware Adaptation Strategies for Cloud Applications. *IEEE Transactions on Cloud Computing*, 4(2):152–165, April 2016 (ranked as Q1 by Scimago).
- U. Wajid, C. Cappiello, P. Plebani, B. Pernici, N. Mehandjiev, M. Vitali, M. Gienger, K. Kavoussanakis, D. Margery, D. G. Perez, and P. Sampaio. On Achieving Energy Efficiency and Reducing CO<sub>2</sub> Footprint in Cloud Computing. *IEEE Transactions on Cloud Computing*, 4(2):138–151, April 2016 (ranked as Q1 by Scimago).
- L. Baresi, M. Miraz, and P. Plebani. A distributed architecture for efficient Web service discovery. *Service Oriented Computing and Applications*, 10(1):1–17, 2016 (ranked as Q2 by Scimago).
- K. Kritikos, B. Pernici, P. Plebani, C. Cappiello, M. Comuzzi, S. Benrernou, I. Brandic, A. Kertész, M. Parkin, and M. Carro. A Survey on Service Quality Description. *ACM Comput. Surv.*, 46(1):1:1–1:58, July 2013 (ranked as Q1 by Scimago).
- P. Plebani, C. Cappiello, B. Comuzzi, B. Pernici, and S. Yadav. MicroMAIS: executing and orchestrating Web services on constrained mobile devices. *Software: Practice and Experience*, 42(9):1075–1094, 2012 (ranked as Q2 by Scimago).
- P. Plebani and B. Pernici. URBE: Web Service Retrieval Based on Similarity Evaluation. *IEEE Transactions on Knowledge and Data Engineering*, 21(11):1629–1642, Nov 2009 (ranked as Q1 by Scimago).



D. Ardagna, M. Comuzzi, E. Mussi, B. Pernici, and P. Plebani. PAWS: A Framework for Executing Adaptive Web-Service Processes. *IEEE Software*, 24(6):39–46, Nov 2007 (ranked as Q2 by Scimago).

D. Bianchini, V. De Antonellis, B. Pernici, and P. Plebani. Ontology-based methodology for e-service discovery. *Information Systems*, 31(4–5):361 – 380, 2006 (ranked as Q1 by Scimago).

V. De Antonellis, M. Melchiori, L. De Santis, M. Mecella, E. Mussi, B. Pernici, and P. Plebani. A layered architecture for flexible Web service invocation. *Software: Practice and Experience*, 36(2):191–223, 2006 (ranked as Q2 by Scimago).

E. Colombo, C. Francalanci, B. Pernici, P. Plebani, M. Mecella, V. De Antonellis, and M. Melchiori. Cooperative Information Systems in Virtual Districts: the VISPO Approach. *IEEE Data Eng. Bull.*, 25(4):36–40, 2002.

### **International Conferences and Workshops (peer-reviewed)**.....

M. Vitali, J. Soldani, R. Amadini, A. Brogi, S. Forti, S. Gazza, S. Giallorenzo, P. Plebani, F. Ponce, and G. Zavattaro. FREEDA: failure-resilient, energy-aware, and explainable deployment of microservice-based applications over cloud-iot infrastructures. In *Proceedings of the Research Projects Exhibition Papers Presented at the 36th International Conference on Advanced Information Systems Engineering(CAiSE 2024)*, volume 3692 of *CEUR Workshop Proceedings*, pages 69–75. CEUR-WS.org, 2024.

G. Quattrocchi and P. Plebani. Trustworthy collaborative business intelligence using zero-knowledge proofs and blockchains. In *Intelligent Information Systems - CAiSE Forum 2024, Limassol, Cyprus, June 3-7, 2024, Proceedings*, volume 520 of *LNBIP*, pages 29–37. Springer, 2024.

M. Falconi, G. Lombardo, P. Plebani, and S. Werner. Data friction: Physics-inspired metaphor to evaluate the technical difficulties in trustworthy data sharing. In *Advanced Information Systems Engineering - 36th International Conference, CAiSE 2024, Proceedings*, volume 14663 of *LNCS*, pages 300–315. Springer, 2024.

M. Bertolini, G. Meroni, and P. Plebani. Trusted compliance checking on blockchain with commitments: A model-driven approach. In *Business Process Management Forum - BPM 2023 Forum, Proceedings*, volume 490 of *LNBIP*, pages 3–19. Springer, 2023.

M. Salnitri, P. Plebani, and A. Raffone. Towards designing energy-aware cybersecurity policies. In *Intelligent Information Systems - CAiSE Forum 2023, Zaragoza, Spain, June 12-16, 2023, Proceedings*, volume 477 of *LNBIP*, pages 26–33. Springer, 2023.

P. Plebani, R. I. Kat, F. Pallas, S. Werner, G. Inches, P. Laud, and R. Santiago. TEADAL: trustworthy, energy-aware federated data lakes along the computing continuum. In *Proceedings of the Research Projects Exhibition Papers Presented at the 35th International Conference on Advanced Information Systems Engineering (CAiSE 2023)*, volume 3413 of *CEUR Workshop Proceedings*, pages 28–35. CEUR-WS.org, 2023.

M. Falconi and P. Plebani. Adopting data mesh principles to boost data sharing for clinical trials. In *IEEE International Conference on Digital Health, ICDH 2023*, pages 298–306. IEEE, 2023.

F. Jeffar and P. Plebani. Federated data products: A confluence of data mesh and gaia-x for data sharing. In *Service-Oriented Computing - ICSOC 2023 Workshops - AI-PA, ASOCA, SAPD, SQS, SSCOPE, WESOACS and Satellite Events, Rome, Italy, November 28 - December 1, 2023, Revised Selected Papers*, volume 14518 of *LNCS*, pages 107–118. Springer, 2023.

B. Sedlak, V. Casamayor-Pujol, P. Kumar Donta, S. Werner, K. Wolf, M. Falconi, F. Pallas, S. Dustdar, S. Tai, and P. Plebani. Towards serverless data exchange within federations. In *Service-Oriented Computing - 17th Symposium and Summer School, SummerSOC 2023, Revised Selected Papers*, volume 1847 of *Communications in Computer and Information Science*, pages 144–153. Springer, 2023.

C. Cappiello, M. Gribaudo, P. Plebani, M. Salnitri, and L. Tanca. Enabling real-world medicine with data lake federation: A research perspective. In *Heterogeneous Data Management, Polystores, and Analytics for*

*Healthcare - VLDB Workshops, Poly 2022 and DMAH 2022, Virtual Event, September 9, 2022, Revised Selected Papers*, volume 13814 of LNCS, pages 39–56. Springer, 2022.

M. Cantarutti, P. Plebani, and M. Salnitri. Fast replica of polyglot persistence in microservice architectures for fog computing. In *Service-Oriented Computing*, pages 45–55, Cham, 2020. Springer International Publishing.

C. Di Ciccio, G. Meroni, and P. Plebani. Business process monitoring on blockchains: Potentials and challenges. In *Enterprise, Business-Process and Information Systems Modeling*, pages 36–51, Cham, 2020. Springer International Publishing.

Giovanni Meroni, Marouan Mizmizi, Pierluigi Plebani, and Luca Reggiani. Improving mobile business process monitoring with enhanced nfv mano: A method to elicit connectivity requirements from process models. In *Proceedings of the 35th Annual ACM Symposium on Applied Computing, SAC '20*, page 69–76. Association for Computing Machinery, 2020.

P. Plebani, M. Salnitri, and M. Vitali. Fog Computing and Data as a Service: a Goal-Based Modeling Approach to Enable Effective Data Movements. In *Advanced Information Systems Engineering - 30th International Conference, CAiSE 2018, Tallin, Estonia, June 11-15, 2018, Proceedings*, 2018.

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