

In compliance with DR n. 1468 del 05/12/2016 art. 22 c. 4

## RESEARCH ACTIVITY

### Conference papers

- [c1] Matteo Francia, Danilo Pianini, Jacob Beal, and Mirko Viroli. Towards a foundational API for resilient distributed systems design. In *2nd IEEE International Workshops on Foundations and Applications of Self\* Systems, FAS\*W@SASO/ICCAC 2017, Tucson, AZ, USA, September 18-22, 2017*, pages 27–32. IEEE Computer Society, 2017.
- [c2] Matteo Francia, Matteo Golfarelli, and Stefano Rizzi. A similarity function for multi-level and multi-dimensional itemsets. In *Proceedings of the 26th Italian Symposium on Advanced Database Systems, Castellana Marina (Taranto), Italy, June 24-27, 2018*, volume 2161 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2018.
- [c3] Matteo Francia, Enrico Gallinucci, and Federico Vitali. Map-matching on big data: a distributed and efficient algorithm with a hidden markov model. In *42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019, Opatija, Croatia, May 20-24, 2019*, pages 1238–1243. IEEE, 2019.
- [c4] Matteo Francia, Matteo Golfarelli, and Stefano Rizzi. Augmented business intelligence. In *Proceedings of the 21st International Workshop on Design, Optimization, Languages and Analytical Processing of Big Data, co-located with EDBT/ICDT Joint Conference, DOLAP@EDBT/ICDT 2019, Lisbon, Portugal, March 26, 2019*, volume 2324 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2019.
- [c5] Matteo Francia, Enrico Gallinucci, Matteo Golfarelli, and Stefano Rizzi. OLAP querying of document stores in the presence of schema variety. In *Proceedings of the 28th Italian Symposium on Advanced Database Systems, Villasimius, Sud Sardegna, Italy (virtual due to Covid-19 pandemic), June 21-24, 2020*, volume 2646 of *CEUR Workshop Proceedings*, pages 128–135. CEUR-WS.org, 2020.
- [c6] Faten El Outa, Matteo Francia, Patrick Marcel, Verónika Peralta, and Panos Vassiliadis. Towards a conceptual model for data narratives. In *Conceptual Modeling - 39th International Conference, ER 2020, Vienna, Austria, November 3-6, 2020, Proceedings*, volume 12400 of *Lecture Notes in Computer Science*, pages 261–270. Springer, 2020.
- [c7] Faten El Outa, Matteo Francia, Patrick Marcel, Verónika Peralta, and Panos Vassiliadis. Supporting the generation of data narratives. In *ER Forum, Demo and Posters 2020 co-located with 39th International Conference on Conceptual Modeling (ER 2020), Vienna, Austria, November 3-6, 2020*, volume 2716 of *CEUR Workshop Proceedings*, pages 168–172. CEUR-WS.org, 2020.
- [c8] Matteo Francia, Enrico Gallinucci, and Matteo Golfarelli. Towards conversational OLAP. In *Proceedings of the 22nd International Workshop on Design, Optimization, Languages and Analytical Processing of Big Data co-located with EDBT/ICDT 2020 Joint Conference, DOLAP@EDBT/ICDT 2020, Copenhagen, Denmark, March 30, 2020*, volume 2572 of *CEUR Workshop Proceedings*, pages 6–15. CEUR-WS.org, 2020.
- [c9] Antoine Chédin, Matteo Francia, Patrick Marcel, Verónika Peralta, and Stefano Rizzi. The tell-tale cube. In *Advances in Databases and Information Systems - 24th European Conference, ADBIS 2020, Lyon, France, August 25-27, 2020, Proceedings*, volume 12245 of *Lecture Notes in Computer Science*, pages 204–218. Springer, 2020.

### Journal articles

- [j1] Matteo Francia, Enrico Gallinucci, and Matteo Golfarelli. Social BI to understand the debate on vaccines on the web and social media: unraveling the anti-, free-, and pro-vax communities in Italy. *Social Netw. Analys. Mining*, 9(1):46:1–46:16, 2019.
- [j2] Matteo Francia, Matteo Golfarelli, and Stefano Rizzi. Summarization and visualization of multi-level and multi-dimensional itemsets. *Inf. Sci.*, 520:63–85, 2020.
- [j3] Matteo Francia, Matteo Golfarelli, and Stefano Rizzi. A-BI<sup>+</sup>: A framework for augmented business intelligence. *Inf. Syst.*, 92:101520, 2020.
- [j4] Matteo Francia, Enrico Gallinucci, Matteo Golfarelli, and Nicola Santolini. Dart: De-anonymization of personal gazetteers through social trajectories. *Journal of Information Security and Applications*, 55:102634, 2020.
- [j5] Fengmei Jin, Wen Hua, Thomas Zhou, Jiajie Xu, Matteo Francia, Maria Orowska, and Xiaofang Zhou. Trajectory-based spatiotemporal entity linking. *IEEE Transactions on Knowledge and Data Engineering*, 2020.

## Conferences

- **SEBD2018**
- **DOLAP2019@EDBT/ICDT**
- **MIPRO2019**
- **DOLAP2020@EDBT/ICDT**
- **ADBIS2020**

## PhD Schools

- **BISS2018**, from 12/03/2018 to 16/03/2018, Bertinoro, Italy
- **EBISS2019**, from 30/06/2019 to 07/07/2019, Berlin, Germany

## Visiting PhD student

- 02 Nov 2019 - 29 Feb 2020, Data Science Research Group, ITEE, University of Queensland, Australia

## Teaching and authorized activity

- Feb - Mar 2019/2018, Laboratory lecturer “Information Systems and Business Intelligence” at *Master in Finance, Control, and Auditing*, Bologna Business School, BO, Italy
- Scientific advisor “Riduzione impatto della maculatura bruna del pero”, CRPV (Crop Production Research Centre; [www.crpv.it](http://www.crpv.it)), FC, Italy
- Sep 2019; May - Jul 2018, Scientific advisor “Analytics on trajectory data”, Sylla srl, RN, Italy
- May - Jun 2019, Lecturer “Relational databases” at *IFTS “Big data: new competences for new professions”*, Assoform, RN, Italy
- Feb 2019, Lecturer “Big Data and Analytics” at *IFTS “Industry 4.0 & IT reference technologies”*, FORMart, FC, Italy
- Sep 2017, Lecturer “Database and data management” at *FSE “Tecnico specializzato in programmazione di applicazioni HMI/SCADA”*, Futura srl, BO, Italy