

# List of Publications

## Fabrizio Montesi

Publications in venues in the top 20% of their respective fields are marked with \*, according to standard rankings. Specifically, I refer to the lists maintained by the Danish Ministry for Higher Science and Education—in this case, I refer to Level 2 (the highest)—and/or the international association CORE (Computing Research and Education)—in this case, I refer to Level A or above. I report the ranking that the venue had in the year of publication (rankings may change over time).

For my *publication statistics* (citation number, h-index, i10-index) and a comparison to the statistics of excellent peers in my field, please see the end of this document.

**How to read this list** My field (Computer Science) has remarkably different traditions from other disciplines found in life sciences and some engineering communities.

**Publication venues:** Many top-ranked publications venues in computer science are conferences (e.g., CONCUR, FoSSaCS, POPL). Publications in our conference proceedings are full scientific articles. It is not uncommon to see tenured professors with just a few journal publications in their CVs, since top conference proceedings can be more prestigious and have a much higher visibility and impact factor than most journals. Even the workshops that I list below are organised just as peer-reviewed conference (they are called workshops for historical reasons), and are not to be confused with workshops in other scientific fields, which can be discussion-oriented and might not require a full article.

**Corresponding authors:** Corresponding authorship carries no value in my field. Almost all conference publications (even the top venues) do not even specify the corresponding author. Even being corresponding author in a journal article is not considered important. Nevertheless, I mark the corresponding author of my articles with a C, when there is one.

**Author ordering:** Authors are listed alphabetically, regardless of the role played by each author in the publication. This is similar to the community of mathematics. For my Ph.D. defence, my co-authors documented that I played a major role in all papers (the highest; the other possibilities were “proportional” and “minor”). I have some papers that do not follow alphabetical order and in which I am first author; these are very rare occurrences in my field.

## Peer-reviewed publications

### Journal Articles

1. \* M. Carbone, **F. Montesi**<sup>C</sup>, C. Schürmann. Choreographies, logically. In *Distributed Computing*, Vol. 31, pp. 51–67, 2018.
2. \* M. Carbone, **F. Montesi**<sup>C</sup>, C. Schürmann, N. Yoshida. Multipart Session Types as Coherence Proofs. In *Acta Informatica*, Vol. 54, pp. 243–269, 2017.
3. \* **F. Montesi**<sup>C</sup>. Process-aware Web Programming with Jolie. In *Science of Computer Programming*, Vol. 130, pp. 69–96, 2016.
4. D. Ancona, V. Bono, M. Bravetti, J. Campos, G. Castagna, P. Deniélou, S. J. Gay, N. Gesbert, E. Giachino, R. Hu, E. B. Johnsen, F. Martins, V. Mascardi, **F. Montesi**, R. Neykova, N. Ng, L. Padovani, V. T. Vasconcelos, N. Yoshida. Behavioral Types in Programming Languages. In *Foundations and Trends in Programming Languages*, Vol. 3, pp. 95–230, 2016.

5. M. Gabbrielli, S. Giallorenzo, **F. Montesi**. Service-Oriented Architectures: from Design to Production exploiting Workflow Patterns. In *Advances in Distributed Computing and Artificial Intelligence Journal (ADCAIJ)*, Vol. 3, pp. 26–52, 2014.
6. \* C. Guidi, I. Lanese<sup>C</sup>, **F. Montesi**, G. Zavattaro. Dynamic Error Handling in Service Oriented Applications. In *Fundamenta Informaticae*, Vol. 95(1), pp. 73–102, 2009.
7. **F. Montesi**, C. Guidi, R. Lucchi, G. Zavattaro. Jolie: a Java Orchestration Language Interpreter Engine. In *Electronic Notes in Theoretical Computer Science (ENTCS)*, Vol. 181, pp. 19–33, 2007.

## Articles in Conference Proceedings

1. S. Giallorenzo, **F. Montesi**, M. Gabbrielli. Applied Choreographies. In *Proc. of the 38th International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE)*, to appear, 15 pages, 2018.
2. **F. Montesi**, J. Weber. From the decorator pattern to circuit breakers in microservices. In *Proc. of 33rd ACM Symposium on Applied Computing (SAC)*, to appear, 3 pages, 2018.
3. L. Cruz-Filipe, **F. Montesi**, M. Peressotti. Communications in Choreographies, Revisited. In *Proc. of 33rd ACM Symposium on Applied Computing (SAC)*, to appear, 8 pages, 2018.
4. \* L. Cruz-Filipe, Kim S. Larsen, **F. Montesi**. The Paths to Choreography Extraction. In *Proc. of 20th International Conference on Foundations of Software Science and Computation Structures (FoSSaCS)*, pp. 424–440, 2017.
5. \* **F. Montesi**. Classical Higher-order Processes. In *Proc. of the 37th International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE)*, pp. 171–178, 2017.
6. \* L. Cruz-Filipe, **F. Montesi**. Procedural Choreographic Programming. In *Proc. of the 37th International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE)*, pp. 92–107, 2017.
7. **F. Montesi**, Dan S. Thrane. Packaging Microservices. In *Proc. of the 17th International Conference on Distributed Applications and Interoperable Systems (DAIS)*, pp. 131–137, 2017.
8. L. Cruz-Filipe, **F. Montesi**. Encoding Asynchrony in Choreographies. In *Proc. of 32nd ACM Symposium on Applied Computing (SAC)*, pp. 1175–1177, 2017.
9. \* M. Carbone, S. Lindley, **F. Montesi**, C. Schürmann, P. Wadler. Coherence Generalises Duality: a logical explanation of multiparty session types. In *Proc. of the 27th International Conference on Concurrency Theory (CONCUR)*, pp. 33:1–15, 2016.
10. \* L. Cruz-Filipe, **F. Montesi**. Choreographies in Practice. In *Proc. of the 36th International Conference on Formal Techniques for Distributed Objects, Components, and Systems (FORTE)*, pp. 114–123, 2016.
11. L. Cruz-Filipe, **F. Montesi**. A Core Model for Choreographic Programming. In *Proc. of 13th International Conference on Formal Aspects of Component Software (FACS)*, pp. 17–35, 2016.
12. L. Safina, M. Mazzara, **F. Montesi**, V. Rivera. Data-Driven Workflows for Microservices: Generativity in Jolie. In *Proc. of the 30th IEEE International Conference on Advanced Information Networking and Applications (AINA)*, pp. 430–437, 2016.
13. M. Gabbrielli, S. Giallorenzo, C. Guidi, J. Mauro, **F. Montesi**. Self-Reconfiguring Microservices. In *Theory and Practice of Formal Methods*, pp. 194–210, 2016.
14. \* M. Carbone, **F. Montesi**, C. Schürmann, N. Yoshida. Multiparty Session Types as Coherence Proofs. In *Proc. of the 26th International Conference on Concurrency Theory (CONCUR)*, pp. 412–426, 2015.
15. I. Lanese, **F. Montesi**, G. Zavattaro. The Evolution of Jolie - From Orchestration to Adaptable Choreographies. In *Software, Services, and Systems*, pp. 506–521, 2015.

16. \* M. Carbone, **F. Montesi**, C. Schürmann. Choreographies, Logically. In *Proc. of the 25th International Conference on Concurrency Theory (CONCUR)*, pp. 47–62, 2014.
17. \* M. Carbone, O. Dardha, **F. Montesi**. Progress as Compositional Lock-Freedom. In *Proc. of Coordination Models and Languages (COORDINATION)*, pp. 49–64, 2014.
18. M. Gabbrielli, S. Giallorenzo, **F. Montesi**. Service-Oriented Architectures: From Design to Production Exploiting Workflow Patterns. In *Proc. of Distributed Computing and Artificial Intelligence (DCAI), 11th International Conference*, pp. 131–139, 2014.
19. \* **F. Montesi**, N. Yoshida. Compositional Choreographies. In *Proc. of the 24th International Conference on Concurrency Theory (CONCUR)*, pp. 425–439, 2013.
20. \* M. Carbone, **F. Montesi**. Deadlock-freedom-by-design: Multiparty Asynchronous Global Programming. In *Proc. of 40th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL)*, pp. 263–274, 2013.
21. **F. Montesi**. Process-aware Web Programming with Jolie. In *Proc. of 28th ACM SIGAPP Symposium on Applied Computing (SAC)*, pp. 761–763, 2013.
22. C. Guidi, M. Dalla Preda, M. Gabbrielli, J. Mauro, **F. Montesi**. Service integration via target-transparent mediation. In *Proc. of IEEE International Conference on Service-Oriented Computing and Applications (SOCA)*, pp. 1–5, 2012.
23. C. Guidi, M. Dalla Preda, M. Gabbrielli, J. Mauro, **F. Montesi**. Interface-Based Service Composition with Aggregation. In *Proc. of European Conference on Service-Oriented and Cloud Computing (ESOCC)*, pp. 48–63, 2012.
24. \* **F. Montesi**, M. Carbone. Programming services with correlation sets. In *Proc. of 9th International Conference on Service Oriented Computing (ICSOC)*, pp. 125–141, 2011.
25. \* J. Mauro, M. Gabbrielli, C. Guidi, **F. Montesi**. An efficient management of correlation sets with broadcast. In *Proc. of 13th International Conference on Coordination Models and Languages (COORDINATION)*, pp. 80–94, 2011.
26. I. Lanese, **F. Montesi**. Error Handling: From Theory to Practice. In *Proc. of 4th International Symposium on Leveraging Applications of Formal Methods, Verification, and Validation (ISoLA)*, pp. 66–81, 2010.
27. **F. Montesi**, D. Sangiorgi. A model of evolvable components. In *Proc. of 5th Symposium on Trustworthy Global Computing (TGC)*, pp. 153–171, 2010.
28. I. Lanese, A. Bucchiarone, **F. Montesi**. A Framework for Rule-based Dynamic Adaptation. In *Proc. of 5th Symposium on Trustworthy Global Computing (TGC)*, pp. 284–300, 2010.
29. P. Anedda, M. Gaggero, S. Manca, O. Schiaratura, S. Leo, **F. Montesi**, G. Zanetti. A general service oriented approach for managing virtual machines allocation. In *Proc. of 24th ACM SIGAPP Symposium on Applied Computing (SAC)*, pp. 2154–2161, 2009.
30. I. Lanese, C. Guidi, **F. Montesi**, G. Zavattaro. Bridging the Gap between Interaction- and Process-Oriented Choreographies. In *Proc. of 6th IEEE International Conferences on Software Engineering and Formal Methods (SEFM)*, pp. 323–332, 2008.
31. **F. Montesi**, C. Guidi, I. Lanese, G. Zavattaro. Dynamic Fault Handling Mechanisms for Service-Oriented Applications. In *Proc. of 6th IEEE European Conference on Web Services (ECOWS)*, pp. 225–234, 2008.
32. C. Guidi, I. Lanese, **F. Montesi**, G. Zavattaro. On the interplay between fault handling and request-response service invocations. In *Proc. of 8th International Conference on Application of Concurrency to System Design (ACSD)*, pp. 190–198, 2008.
33. **F. Montesi**, C. Guidi, G. Zavattaro. Composing Services with Jolie. In *Proc. of 5th IEEE European Conference on Web Services (ECOWS)*, pp. 13–22, 2007.

## Articles in Workshop Proceedings

1. L. Cruz-Filipe, **F. Montesi**. On Asynchrony and Choreographies. In *Proc. of the 10th Interaction and Concurrency Experience (ICE)*, Electronic Proceedings in Theoretical Computer Science, Vol. 261, pp. 76–90, 2017.
2. **F. Montesi**. Kickstarting Choreographic Programming. In *Web Services, Formal Methods, and Behavioral Types - 11th International Workshop, WS-FM 2014, and 12th International Workshop, WS-FM/BEAT 2015, Madrid, Spain, September 4-5, 2015, Revised Selected Papers*, pp. 3–10, 2015.
3. I. Lanese, **F. Montesi**, G. Zavattaro. Amending Choreographies. In *Proc. of 9th International Workshop on Automated Specification and Verification of Web Systems (WWV)*, pp. 34–48, 2013.
4. M. Carbone, **F. Montesi**. Merging Multiparty Protocols in Multiparty Choreographies. In *Proc. of Programming Language Approaches to Concurrency and Communication-centric Software workshop (PLACES)*, pp. 21–27, 2012.
5. C. Guidi, **F. Montesi**. Reasoning About a Service-oriented Programming Paradigm. In *Proc. of 4th European Young Researchers Workshop on Service Oriented Computing (YR-SOC)*, pp. 67–81, 2009.

## Book Chapters

1. N. Dragoni, S. Giallorenzo, A. L. Lafuente, M. Mazzara, **F. Montesi**, R. Mustafin, L. Safina. Microservices: yesterday, today, and tomorrow. Book chapter in *Present And Ulterior Software Engineering (PAUSE)*, Springer-Verlag, to appear, 17 pages, 2017.
2. C. Guidi, I. Lanese, M. Mazzara, **F. Montesi**. Microservices: a Language-based Approach. Book chapter in *Present And Ulterior Software Engineering (PAUSE)*, Springer-Verlag, to appear, 8 pages, 2017.
3. **F. Montesi**, C. Guidi, G. Zavattaro. Service-oriented Programming with Jolie. Book chapter in *Web Services Foundations*, pp. 81–107, Springer-Verlag, 2014.

## Edited Journal Issues

1. \* I. Lanese, M. Mazzara, **F. Montesi**. Special Issue: Service-Oriented Architectures and Programming 2013. *Science of Computer Programming (SCP)*, 2015.
2. M. Mazzara, **F. Montesi**, M. Bravetti, A. L. Lafuente. Special Issue: Service-Oriented Architectures and Programming 2014. *Journal of Internet Services and Information Security (JISIS)*, 2014.

## Non Peer-reviewed publications

The following are dissemination articles I wrote under invitation. Article 1 is in a major online magazine for software developers. It describes how some of my results can be used to tackle the emerging software paradigm of microservices (used by Amazon, Netflix, and other major companies). Article 2 is an overview of my M.Sc. thesis, invited after it was awarded as Best M.Sc. thesis in Italy (see Scientific Honours in the CV).

1. **F. Montesi**. Hack your way through the microservices revolution. In InfoWorld, 2015. Available online at <http://www.infoworld.com/article/2903590/application-development/hack-your-way-through-the-microservices-revolution.html>.
2. **F. Montesi**. Jolie: un linguaggio di orchestrazione orientato ai servizi (Jolie: a service-oriented orchestration language). In *Mondo Digitale (Digital World)*, the journal of the Italian National Association for Computer Science and Automatic Calculation (AICA: Associazione Italiana per l'Informatica ed il Calcolo Automatico), Vol. 41, Art. 6, pp. 1–4, 2012. Available online at [http://mondodigitale.aicanet.net/2012-1/giovani\\_talenti\\_index.xml](http://mondodigitale.aicanet.net/2012-1/giovani_talenti_index.xml).

# Publication Statistics

**Statistics for peer-reviewed publications** I report statistics from my Google Scholar profile<sup>1</sup> (as of 9 April 2018).

**h-index:** 20. (I have at least 20 publications with at least 20 citations each.)

**i10-index:** 31. (I have at least 31 publications with at least 10 citations each.)

**citation count:** 1123. (My works have been cited 1123 times.)

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<sup>1</sup>Link to my Google Scholar profile: <http://scholar.google.com/citations?user=zRA6uA4AAAAJ>