

## Europass Curriculum Vitae

### Personal information

Surname(s) / First name(s)

Address(es)

Telephone(s)

Email(s)

Nationality(-ies)

Date of birth

**Bersani, Marcello Maria**

via E. Fonseca Pimentel, 20127, Milan, Italy

+39 320 8213643

marcellomaria.bersani@gmail.com, marcellomaria.bersani@polimi.it

Italian

23 November 1981

### Work experience

Dates

Occupation or position held

Dates

Occupation or position held

Main activities and  
responsibilities

1 Settembre 2017 - now

Assistant professor - RTD-B at Politecnico di Milano - DEEPSE group.

1 April 2012 - 1 Settembre 2017

PhD researcher

Researcher position at Politecnico di Milano in DeepSE group (<http://deepse.dei.polimi.it/>) and, specifically, in the Formal Methods area for reactive systems. From February 2015, I have been involved in the DICE project H2020 DICE-644869 as member of several work packages and task leader.

Dates

Occupation or position held

1 January 2009 - 31 December 2011

PhD student

## Education and training

|             |  |
|-------------|--|
| Dates       | 2011   |
| Title       | PhD in Ingegneria Informatica  |
| University  | Politecnico di Milano, Italy   |
| Thesis      | Bounded Approaches for Infinite State Verification   |
| Grade       | Merito   |
| Dates       | 2007   |
| Title       | Laurea Specialistica - Master  |
| University  | Politecnico di Milano, Italy   |
| Thesis      | Dense Counter Machines: Flatness and Reachability  |
| Dates       | 2003   |
| Title       | Laurea - Bachelor  |
| University  | Politecnico di Milano, Italy   |
| Dates       | 2000   |
| Title       | High school  |
| PhD schools | <i>SAT/SMT Summer School</i> , Semmering, Austria, July 2014<br><i>Highlights of AutoMathA 2010</i> , Wien, November 2010<br><i>QMC 2010</i> , Copenhagen, March 2010<br><i>Logic and Languages for Reliability and Security</i> , Marktoberdorf, August 2009<br><i>Games 2009</i> , Udine, September 2009 |

## Journal papers

- Year 2020  
M.M. Bersani, C. Menghi, P. Pelliccione, M. Rossi, M. Soldo  
*PuRSUE - From Specification of Robotic Environments to Synthesis of Controllers*  
Formal Aspects of Computing  
DOI:10.1007/s00165-020-00509-0  
Ranking: SJR Q2
- C. Menghi, M.M. Bersani, M. Rossi, P. San Pietro  
*Model Checking MITL formulae on Timed Automata: a Logic-Based Approach*  
Transaction of Computational Logic  
DOI:10.1145/3383687  
Ranking: SJR Q1
- Year 2019  
L. Baresi, M.M. Bersani, F. Marconi, G. Quattrocchi and M. Rossi  
*Using Formal Verification to Evaluate the Execution Time of Spark Applications*  
Formal Aspects of Computing  
DOI: 10.1007/s00165-020-00505-4  
Ranking: SJR Q2
- M.M. Bersani, F. Marconi, D.A. Tamburri, A. Nodari, P. Jamshidi  
*Verifying Big Data Topologies By-Design: a Semi-Automated Approach*  
Journal of Big Data 6:40  
DOI: 10.1186/s40537-019-0199-y  
Ranking: SJR Q1 - 1.12 (at paper submission Q1)
- M.M. Bersani, M. Rossi, P. San Pietro  
*On the Initialization of Clocks in Timed Formalisms*  
Theoretical Computer Science  
DOI: 10.1016/j.tcs.2019.11.023  
Ranking: SJR Q1
- Year 2018  
M.M. Bersani, M. Garcia-Valls  
*Online verification in cyber-physical systems: Practical bounds for meaningful temporal costs.*  
Journal of Software: Evolutions and Process  
DOI: 10.1002/smr.1880  
Ranking: SJR Q3 - 0.28 (at paper submission Q3)
- Year 2017  
M.M. Bersani, M. Rossi, P. San Pietro  
*A Logical Characterization of Timed Regular Languages*  
Theoretical Computer Science 658:46-59  
DOI: 10.1016/j.tcs.2016.07.020  
Ranking: SJR Q1 - 0.49 (at paper submission Q1)
- Year 2016  
M.M. Bersani, M. Rossi, P. San Pietro  
*A Tool for Deciding the Satisfiability of Continuous-time Metric Temporal Logic*

|      |   |
|------|---|
|      | Acta Informatica 53(2): 171-206<br>DOI: 10.1007/s00236-015-0229-y<br>Ranking: SJR Q2 - 0.51 (at paper submission Q2)  |
| Year | 2015<br>M.M. Bersani, M. Rossi, P. San Pietro<br><i>An SMT-based Approach to Satisfiability Checking of MITL</i><br>Information and Computation 245: 72-97<br>DOI: 10.1016/j.ic.2015.06.007<br>Ranking: SJR Q2 - 0.58 (at paper submission Q1)  |
| Year | 2014<br>M.M. Bersani, A. Frigeri, A. Morzenti, M. Pradella, M. Rossi, P. San Pietro<br><i>Constraint LTL Satisfiability Checking without Automata</i><br>Journal of Applied Logics 12(4): 522-557<br>DOI: 10.1016/j.jal.2014.07.005<br>Ranking: SJR Q2 at submission time. Title discontinued as of 2018. |
| Year | 2013<br>M.M. Bersani, A. Frigeri, A. Cherubini<br><i>Expressiveness and Complexity of Regular Pure two-dimensional Context-free Languages</i><br>International Journal of Computer Mathematics 90(8): 1708-1733<br>DOI: 10.1080/00207160.2013.787143<br>Ranking: SJR Q2 - 0.42 (at paper submission Q2)   |

## Conference papers

- Year 2018  
D.A. Tamburri, M.M. Bersani, R. Mirandola, G. Pea  
*DevOps Service Observability By-Design: Experimenting with Model-View-Controller*  
European Conference on Service-oriented and Cloud Computing-ESOCC 2018:49-64  
DOI: 10.1007/978-3-319-99819-0\_4
- F. Marconi, G. Quattrocchi, L. Baresi, M.M. Bersani, M. Rossi  
*On the Timed Analysis of Big-Data Applications.*  
Nasa Formal Methods - NFM 2018:315-332  
DOI: 10.1007/978-3-319-77935-5\_22
- Year 2017  
F. Marconi, M.M. Bersani, M. Rossi  
*Formal Verification of Storm Topologies through D-verT*  
Software Architecture: Theory, Technology, and Applications - SATTA, SAC 2017:1168-1174  
DOI: 10.1145/3019612.3019769
- M.M. Bersani, F. Marconi, M. Rossi, M. Erascu, S. Ghilardi  
*Formal verification of data-intensive applications through model checking modulo theories*  
SPIN 2017:98-101  
DOI: 10.1145/3092282.3092300
- Year 2016  
F. Marconi, M.M. Bersani, M. Erascu, M. Rossi  
*Towards the formal verification of data-intensive applications through metric temporal logic*  
International Conference on Formal Engineering Methods, ICFEM 2016:193-209  
DOI: 10.1007/978-3-319-47846-3\_13
- M.M. Bersani, F. Marconi, D. A. Tamburri, P. Jamshidi, A. Nodari  
*Continuous Architecting of Stream-Based Systems*  
Working IEEE/IFIP Conference on Software Architecture - WICSA 2016:146-151  
DOI: 10.1109/WICSA.2016.26
- M.M. Bersani, D. Bianculli, C. Ghezzi, S. Krstic, P. San Pietro  
*Efficient Large-scale Trace Checking Using MapReduce*  
International Conference of Software Engineering - ICSE 2016:888-898  
DOI: 10.1145/2884781.2884832
- M.M. Bersani, M. García-Valls  
*The Cost of Formal Verification in adaptive CPS. An example of a virtualized node.*  
High Assurance Software Engineering - HASE 2016:39-46  
DOI: 10.1109/HASE.2016.46
- Year 2014  
M.M. Bersani, D. Bianculli, C. Ghezzi, S. Krstic, P. San Pietro  
*SMT-Based Checking of SOLOIST over Sparse Traces*  
Fundamental Approaches to Software Engineering - FASE 2014:276-290

DOI: 10.1007/978-3-642-54804-8\_19

L. Ferrucci, M. M. Bersani, M. Mazzara

*An LTL Semantics of Business Workflows with Recovery*

International Conference on Software Paradigm Trends - ICSOFT PT 2014:29-40

DOI: 10.5220/0005110000290040

M. M. Bersani, S. Distefano, L. Ferrucci, M. Mazzara

*A Timed Semantics of Workflows*

*Selected Paper of International Conference on Software Paradigm Trends - ICSOFT PT 2014:365-383*

DOI: 10.1007/978-3-319-25579-8\_21

M.M. Bersani, M. Rossi, P. San Pietro

*A Logical Characterization of Timed (non-)Regular Languages*

Mathematical Foundation of Computer Science - MFCS 2014:75-86

DOI: 10.1007/978-3-662-44522-8\_7

Year

2013

M.M. Bersani, M. Rossi, P. San Pietro

*Deciding Continuous-Time Metric Temporal Logic with Counting Modalities*

Reachability Problems - RP 2013:70-82

DOI: 10.1007/978-3-642-41036-9\_8

M.M. Bersani, M. Rossi, P. San Pietro

*Deciding the Satisfiability of MITL Specifications*

Games and Automata, Languages, Formal Verification - GandALF 2013:64-78

DOI: 10.4204/EPTCS.119.8

M.M. Bersani, M. Rossi, P. San Pietro

*A Tool for Deciding the Satisfiability of Continuous-time Metric Temporal Logic*

Symposium on Temporal Representation and Reasoning - TIME 2013:99-106

DOI: 10.1109/TIME.2013.20

Year

2011

M.M. Bersani, S. Demri

*The Complexity of Reversal-Bounded Model-Checking*

Frontiers of Combining systems - FroCoS 2011:71-86

DOI: 10.1007/978-3-642-24364-6\_6

M.M. Bersani, A. Frigeri, M. Rossi, P. San Pietro

*Completeness of the Bounded Satisfiability Problem for Constraint LTL*

Reachability Problems - RP 2011:58-71

DOI: 10.1007/978-3-642-24288-5\_7

Year

2010

M.M. Bersani, A. Frigeri, A. Morzenti, M. Pradella, M. Rossi, P. San Pietro

*Bounded Reachability for Temporal Logic over Constraint Systems*

Symposium on Temporal Representation and Reasoning - TIME 2010:43-50

DOI: 10.1109/TIME.2010.21

M.M. Bersani, L. Cavallaro, A. Frigeri, M. Pradella, M. Rossi

*SMT-based Verification of LTL Specifications with Integer Constraints and its Application to Runtime Checking of Service Substitutability*

Software Engineering and Formal Methods - SEFM 2010:244-254  
DOI: 10.1109/SEFM.2010.37

Year 2009

M.M. Bersani, C.A. Furia, M. Pradella, M. Rossi

*Integrated Modeling and Verification of Real-Time Systems through Multiple Paradigms*

Software Engineering and Formal Methods - SEFM 2009:13-22  
10.1109/SEFM.2009.16

M. Pradella, M.M. Bersani, A. Frigeri; *A User's Guide to Zot*, arXiv:0912. 5014

**In all the aforementioned papers, contributions of the authors are equal.**

## Workshop papers

Year 2018

M. M. Bersani, F. Marconi, M. Rossi

Trace Checking of Streaming Applications through DICE-TraCT.

International Conference on Performance Engineering - ICPE 2018:159-160

DOI: 10.1145/3185768.3186287

Year 2017

M. Guerriero, D.A. Tamburri, Y. Ridene, F. Marconi, M.M. Bersani, M. Artac

*Towards DevOps for Privacy-by-Design in Data-Intensive Applications: a Research Roadmap*

International Conference on Performance Engineering - ICPE 2017: 139-144

DOI: 10.1145/3053600.3053631

Year 2016

M.M. Bersani, F. Marconi, M. Rossi, M. Erascu

*A tool for Verification of Big-data Applications*

2nd International Workshop on Quality-Aware DevOps, QUDOS 2016:44-45

DOI: 10.1145/2945408.2945419

Year 2014

M. M. Bersani, D. Bianculli, S. Dustdar, A. Gambi, C. Ghezzi, S. Krstic

*Towards the formalization of properties of cloud-based elastic systems*

Principles of Engineering Service-Oriented and Cloud Systems - PESOS 2014:38-47

DOI: 10.1145/2593793.2593798

Year 2013

M.M. Bersani, M. Rossi, P. San Pietro

*On the Satisfiability of Metric Temporal Logics over the Reals*

Workshop on Automated Verification of Critical Systems - AVOCS 2013

M.M. Bersani, A. Cherubini, A. Frigeri

*On some Classes of 2D Languages and their Relations*

Workshop on Combinatorial Image Analysis - IWCI 2011:222-234

DOI: 10.1007/978-3-642-21073-0\_21

**In all the aforementioned papers, contributions of the authors are equal.**

## International Projects

- PRECON-I4.0 <http://www.gii.upv.es/precon-i4/>
- DICE - H2020 Developing Data-Intensive Cloud Applications with Iterative Quality Enhancements - Grant no. 644869 - <http://www.dice-h2020.eu>  
*DICE Verification Tools - Initial Version - Deliverable 3.5*  
*Quality anomaly detection and trace checking tools - Initial Version - Deliverable 4.3*  
*DICE Verification Tools - Intermediate Version - Deliverable 3.6*
- SMSCoM - ERC Grant no. 227977 - <https://cordis.europa.eu/project/rcn/88806/factsheet/en>

## Best paper Awards

- ICSE 2016 *Efficient Large-scale Trace Checking Using MapReduce*  
DOI: 10.1145/2884781.2884832  
General chair: Laura Dillon, PC Co-chairs: Willem Visser, Laurie Williams  
14-22 May 2016  
<http://2016.icse.cs.txstate.edu/program/awards>
- ICSOFT-PT 2014 *An LTL Semantics of Business Workflows with Recovery*  
DOI: 10.5220/0005110000290040  
PC Co-chairs: Jorge Cardoso, José Cordeiro, Marten van Sinderen  
29-31 August 2014  
<http://www.icsoft-pt.org/PreviousAwards.asp>

## Conference Talks

- HASE 2016 *The Cost of Formal Verification in adaptive CPS. An example of a virtualized node.* Orlando, Florida.
- MFGS 2014 *A Logical Characterization of Timed (non-)Regular Languages.* Budapest, Hungary.
- GandALF 2013 *Deciding the Satisfiability of MITL Specifications.* Borca di Cadore, Italy.  
TIME 2013 *A Tool for Deciding the Satisfiability of Continuous-time Metric Temporal Logic.* Pensacola, Florida.
- FroCoS 2011 *The complexity of Reversal-Bounded Model-Checking.* Saarbrücken, Germany.  
IWCIA 2011 *On some Classes of 2D Languages and their Relations.* Madrid, Spain.  
RP 2011 *Completeness of the Bounded Satisfiability Problem for Constraint LTL.* Genova, Italy.
- TIME 2010 *Bounded Reachability for Temporal Logic over Constraint Systems.* Paris, France.  
SEFM 2010 *SMT-based Verification of LTL Specifications with Integer Constraints and its Application to Runtime Checking of Service Substitutability.* Pisa, Italy.
- SEFM 2009 *Integrated Modeling and Verification of Real-Time Systems through Multiple Paradigms.* Hanoi, Vietnam.



## Bibliometrics

Citations 356  
H-index 11

Scopus  
Citations 189  
H-index 9

## International activity

Collaborations

- University Carlos III, Madrid, Spain - Distributed Real-time System Lab, since 2015.
- University of Gothenburg, Sweden - Chalmers, Department of Computer Science and Engineering - Software Engineering Group, since 2018
- TU/e JADS, s'Hertogenbosch, The Netherlands - W&I, since 2017
- Università Statale di Milano, Italy - Department of Mathematic, 2017
- Imperial College, London, United Kingdom - Department of Computing, from 2015 to 2018
- West University of Timisoara, Romania - leAT, from 2015 to 2018
- University of Zaragoza, Spain - Computer Science and Systems Engineering Department - Distributed Computing Group (DisCo), from 2015 to 2018
- University of Messina, Italy - Dipartimento di Scienze matematiche e informatiche, scienze fisiche e scienze della terra, Mobile and Distributed Systems Laboratory (MDSLab), since 2015
- Innopolis University, Kazan, Russia - Lab of Software and Service Engineering, from 2013 to 2014
- TU Wien, Austria - Institute of Information Systems Engineering, Distributed System Group, since 2019
- University of Luxemburg, Luxemburg - since 2019
- ENS Cachan, Paris - Laboratoire Spécification et Vérification (LSV), from 2011 to 2012

Roles Formal Methods Europe - Communications Committee - <http://www.fm europe.org/communications/>

Editorial Boards Journal of Big-Data - Springer - ISSN 21961115

Dagstuhl Seminar Specification Formalisms for Modern Cyber-Physical Systems, February 10 – 15 , 2019, Dagstuhl Seminar 19071

Visiting

- TU Wien, Austria - Institute of Information Systems Engineering, Distributed System Group - February 2019
- University Carlos III, Madrid, Spain - Distributed Real-time System Lab - November 2018
- ENS Cachan - Laboratoire Spécification et Vérification (LSV) January 2011, July 2011

Chair

- *MSE@TOOLS*: Chair of MSE - Microservices: Science and Engineering - TOOLS 2019 - <http://www.mse-tools19.polimi.it/>
- *SAC/SA-TTA 2019*: Track chair of International Conference of Service Oriented Application and Programming - <http://sac-soap.sdu.dk/>
- *MSE@SEFM*: Chair of MSE - Microservices: Science and Engineering - SEFM 2018 <https://mse-staf18.fbk.eu/>

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|-------------|---|
|             | <ul style="list-style-type: none"> <li>- <i>MSE@SEFM</i>: Chair of MSE - Microservices: Science and Engineering - SEFM 2017 <a href="https://mse-sefm17.fbk.eu/">https://mse-sefm17.fbk.eu/</a></li> <li>- <i>VeryComp 2016</i>: Organizer and Track chair of International Workshop on Formal to Practical Software Verification and Composition - <a href="http://verycomp2016.disim.univaq.it/">http://verycomp2016.disim.univaq.it/</a></li> <li>- <i>SAC/SOAP 2015</i>: Track chair of International Conference of Service Oriented Application and Programming - <a href="http://sac-soap.sdu.dk/">http://sac-soap.sdu.dk/</a></li> <li>- <i>VERY* 2015</i>: Organizer and Track chair of International Workshop on Verification of Self-* Systems - <a href="http://verystar.cs.unibo.it/">http://verystar.cs.unibo.it/</a></li> <li>- <i>MOD* 2014</i>: Organizer and Track chair of International Workshop on Logics and Model-checking of Self-* Systems - <a href="http://modstar.cs.unibo.it/modstar2014/">http://modstar.cs.unibo.it/modstar2014/</a></li> </ul>   |
| Committee   | <ul style="list-style-type: none"> <li>- <i>BeWare 2019</i>: <a href="https://bware2019.github.io/home">https://bware2019.github.io/home</a></li> <li>- <i>Formal Methods 2019</i>: <a href="http://formalmethods2019.inesctec.pt/">http://formalmethods2019.inesctec.pt/</a></li> <li>- <i>PSI 2019</i>: <a href="https://psi.nsc.ru/">https://psi.nsc.ru/</a></li> <li>- <i>SAC/SA-TTA 2019</i>: <a href="http://dinamico2.unibg.it/sa-tta/2019/index.html">http://dinamico2.unibg.it/sa-tta/2019/index.html</a></li> <li>- <i>Formalise 2019</i>: <a href="https://2019.icse-conferences.org/track/Formalise-2019-papers">https://2019.icse-conferences.org/track/Formalise-2019-papers</a></li> <li>- <i>SoftEng 2019</i>: <a href="https://www.iaria.org/conferences2019/ComSOFTENG19.html">https://www.iaria.org/conferences2019/ComSOFTENG19.html</a></li> <li>- <i>ICSOFT-PT 2019</i>: <a href="http://www.icsoft-pt.org/">http://www.icsoft-pt.org/</a></li> <li>- <i>SEDA 2018</i>: <a href="https://easychair.org/conferences/?conf=seda2018">https://easychair.org/conferences/?conf=seda2018</a></li> <li>- <i>SAC/SOAP 2016</i>: PC member of International Conference of Service Oriented Application and Programming - <a href="http://...">http://...</a></li> <li>- <i>ICSOFT-PT 2015</i>: <a href="http://www.icsoft-pt.org/">http://www.icsoft-pt.org/</a></li> <li>- <i>PSI 2015</i>: <a href="http://easychair.org/smart-program/PSI2015/index.html">http://easychair.org/smart-program/PSI2015/index.html</a></li> </ul> |
| Subreviewer | <ul style="list-style-type: none"> <li>- <i>LATA 2019</i>: International Conference on Language and Automata Theory and Applications - <a href="http://lata2019.irdta.eu/">http://lata2019.irdta.eu/</a></li> <li>- <i>VeryComp 2016</i>: International Workshop on Formal to Practical Software Verification and Composition - <a href="http://verycomp2016.disim.univaq.it/">http://verycomp2016.disim.univaq.it/</a></li> <li>- <i>FMICS 2015</i>: International Workshop on Formal Methods for Industrial Critical Systems - <a href="http://fmics.inria.fr/workshop-20/">http://fmics.inria.fr/workshop-20/</a></li> <li>- <i>TIME 2014</i>: International Symposium on Temporal Representation and Reasoning - <a href="http://time2014.di.univr.it">http://time2014.di.univr.it</a></li> <li>- <i>DLT 2013</i>: Development in Language Theory - <a href="http://dlt2013.sciencesconf.org/">http://dlt2013.sciencesconf.org/</a></li> <li>- <i>JISIS 2011</i>: Journal of Internet Services and Information Security - <a href="http://www.jisis.org/">http://www.jisis.org/</a></li> </ul>  |

## Teaching activity

|           |   |
|-----------|---|
| Year      | 2019/2020   |
| Professor | Software Engineering Methodologies for Security, Politecnico di Milano - Bocconi<br>Informatica e Elementi di Informatica Medica, Politecnico di Milano<br>Automated Verification of Timed systems - PhD course, Politecnico di Milano  |
| Assistant | Formal Languages and Compilers, Politecnico di Milano   |
| Year      | 2018/2019   |
| Professor | Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Como  |
| Assistant | Formal Languages and Compilers, Politecnico di Milano   |
| Year      | 2017/2018   |
| Professor | Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Como<br>Automated Verification of Timed systems - PhD course, Politecnico di Milano   |
| Assistant | Formal Languages and Compilers, Politecnico di Milano   |
| Year      | 2016/2017   |
| Professor | Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Milano.   |
| Assistant | Formal Languages and Compilers, Politecnico di Milano   |
| Year      | 2015/2016   |
| Professor | Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Como<br>Automated Verification of Timed systems - PhD course, Politecnico di Milano   |
| Assistant | Formal Languages and Compilers, Politecnico di Milano   |
| Year      | 2014/2015   |
| Assistant | Informatica A (Ing. Gestionale/Matematica), Politecnico di Milano<br>Formal Languages and Compilers, Politecnico di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Como  |
| Year      | 2013/2014   |
| Assistant | Informatica A (Ing. Gestionale/Matematica), Politecnico di Milano<br>Laboratorio Informatica 1 (Ing. Informatica), Politecnico di Milano<br>Formal Languages and Compilers, Politecnico di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Milano<br>Algoritmi e Principi dell'Informatica, Politecnico di Milano, polo di Como |
| Year      | 2012/2013   |
| Assistant | Informatica A (Ing. Gestionale/Matematica), Politecnico di Milano<br>Formal Languages and Compilers, Politecnico di Milano<br>Formal Languages and Compilers, Politecnico di Milano<br>Software Engineering, Politecnico di Milano  |
| Year      | 2009/2010   |
| Assistant | Theoretical Computer Science, Politecnico di Milano<br>Formal Languages and Compilers, Politecnico di Milano  |
| Year      | 2008/2009   |

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| Assistant | Informatica per l'ambiente e il territorio, Politecnico di Milano<br>Software Engineering, Politecnico di Milano |
| Year      | 2007/2008  |
| Assistant | Software Engineering , Politecnico di Milano   |

## Additional education

|       |   |
|-------|---|
| Date  | June 2004   |
| Title | <i>Licenza di teoria e solfeggio</i><br>Conservatoire "F.A. Bonporti"<br>Riva del Garda (TN)                    |
| Date  | June 2006   |
| Title | <i>Armonia complementare</i><br>Conservatoire "G. Nicolini"<br>Piacenza   |
| Date  | June 2007   |
| Title | <i>Storia della musica</i><br>Conservatoire "E. Cantelli"<br>Novara   |
| Date  | June 2007   |
| Title | <i>Diploma di compimento inferiore</i> Classical Guitar<br>Conservatoire "F.A. Bonporti"<br>Riva del Garda (TN) |
| Date  | September 2007  |
| Title | <i>Diploma di compimento medio</i> Classical Guitar<br>Conservatoire "E. Cantelli"<br>Novara                    |
| Date  | June 2009   |
| Title | <i>Diploma di compimento superiore</i> Classical Guitar<br>Conservatoire "E. Cantelli"                          |

Date: 26/08/2019

*Marcello Maria Bersani*