

Marijana Lazić

Curriculum Vitae

☎ +49 89 289 17230
✉ lazic@in.tum.de
🌐 www7.in.tum.de/~lazic



Personal Information

Born May 6, 1988 in Šabac, Serbia
Nationality Serbian
Languages Serbian (native), English (fluent),
German and Spanish (basic knowledge)
Address Technische Universität München
Institut für Informatik (I7)
Boltzmannstraße 3
85748 Garching b. München, Germany
Web <https://www7.in.tum.de/~lazic/>

Education

2015–2019 **Ph.D. studies in Computer Science**, *Technische Universität Wien, Austria*.
Thesis Reduction Techniques for Parameterized Model Checking and Synthesis of Fault-Tolerant Distributed Algorithms
Supervisors Privatdoz. Dr. Josef Widder and Privatdoz. Dr. Igor Konnov
(Initially supervised by Prof. Dr. Helmut Veith†)
GPA 1 (Excellent), Passed with Distinctions

2011–2012 **Master studies in Mathematics**, *University of Novi Sad, Serbia*.
Prof. title Master Professor in Mathematics
GPA 9.61/10 (Excellent)
Thesis Power structures and Multialgebras
Supervisor Prof. Dr. Rozalia Madarasz Szilagy

2007–2011 **Bachelor studies in Mathematics**, *University of Novi Sad, Serbia*.
Prof. title Bachelor with Honors in Mathematics Teaching
GPA 9.47/10 (Exceptionally good)

Work Experience

- 06/2019–Present **Postdoctoral Researcher**, *Institut für Informatik (I7), Technische Universität München*, with Prof. Javier Esparza.
- Teaching assistant in *Automata and Formal Languages*, Winter semester 2019/2020
 - Teaching assistant in *Logic*, Summer semester 2020
- 02/2015–05/2019 **Project Assistant**, “*Formal Methods in Systems Engineering*”, *Institut for Information Systems 184/4, Technische Universität Wien, Vienna, Austria*.
- Teaching assistant in *Formal Methods in Computer Science*, Winter semester 2018/2019
- 2013–2015 **Teaching Assistant**, *University of Novi Sad, Novi Sad, Serbia*.
- *Algebra 1* (Applied Mathematics, Graduate Professor of Mathematics)
 - *Algebra 2* (Applied Mathematics)
 - *Algebra for students of informatics* (Information Technologies)
 - *Business Mathematics* (Geography, Tourism and Hotel Management)
 - *Geometry 1* (Graduate Professor of Mathematics)
 - *Theoretical Foundations of Mathematics 1* (Information Technologies)
 - *Theoretical Foundations of Mathematics 2, Automata theory* (Information Technologies)
- 06/2014–08/2014 **Project Assistant**, *Institute for Algebra, Johannes Kepler University, Linz, Austria*.

Publications

- 2019 Éric Goubault, Marijana Lazić, Jérémy Ledent, and Sergio Rajsbaum. Wait-free solvability of equality negation tasks. In *DISC*, volume 146 of *LIPICs*, pages 21:1–21:16. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 2019.
- 2019 Éric Goubault, Marijana Lazić, Jérémy Ledent, and Sergio Rajsbaum. A dynamic epistemic logic analysis of the equality negation task. In *DaLi*, volume 12005 of *Lecture Notes in Computer Science*, pages 53–70. Springer, 2019.
- 2019 Nathalie Bertrand, Igor Konnov, Marijana Lazić, and Josef Widder. Verification of Randomized Consensus Algorithms Under Round-Rigid Adversaries. In *30th International Conference on Concurrency Theory (CONCUR 2019)*, volume 140 of *LIPICs*, pages 33:1–33:15. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2019.
- 2019 Idan Berkovits, Marijana Lazić, Giuliano Losa, Oded Padon, and Sharon Shoham. Verification of threshold-based distributed algorithms by decomposition to decidable logics. In *CAV (2)*, volume 11562 of *Lecture Notes in Computer Science*, pages 245–266. Springer, 2019.
- 2018 Cezara Dragöi, Marijana Lazić, and Josef Widder. Communication-closed layers as paradigm for distributed systems: A manifesto. In *Sinteza*, pages 131–138, 2018.
- 2017 Marijana Lazić, Igor Konnov, Josef Widder, and Roderick Bloem. Synthesis of distributed algorithms with parameterized threshold guards. In *OPODIS*, volume 95 of *LIPICs*, pages 32:1–32:20, 2017.
- 2017 Igor V. Konnov, Marijana Lazić, Helmut Veith, and Josef Widder. A short counterexample property for safety and liveness verification of fault-tolerant distributed algorithms. In *Proceedings of the 44th ACM SIGPLAN Symposium on Principles of Programming Languages, POPL 2017, Paris, France, January 18-20, 2017*, pages 719–734, 2017.

- 2017 Igor Konnov, Marijana Lazić, Helmut Veith, and Josef Widder. Para²: Parameterized Path Reduction, Acceleration, and SMT for Reachability in Threshold-Guarded Distributed Algorithms. *Formal Methods in System Design*, 2017.
- 2016 Erhard Aichinger, Marijana Lazić, and Nebojša Mudrinski. Finite generation of congruence preserving functions. *Monatshefte für Mathematik*, (181):35–62, 2016.

Invited Talks

- November 2018 **Parameterized Verification of Randomized Distributed Algorithms under Round-Rigid Adversaries**, TU Munich, Germany.
- May 2018 **Synthesizing thresholds for fault-tolerant distributed algorithms**, *Formal Methods and Fault-Tolerant Distributed Computing: Forging an Alliance*, Dagstuhl seminar, Germany.
- December 2017 **Parameterized Verification and Synthesis of Distributed Algorithms**, Tel Aviv University, Tel Aviv, Israel.
- February 2017 **A Short Counterexample Property for Safety and Liveness Verification of Fault-tolerant Distributed Algorithms**, University of Novi Sad (Faculty of Sciences and Faculty of Technical Sciences), Novi Sad, Serbia.
- July 2016 **Parameterized Verification of Liveness of Distributed Algorithms**, Yale University, New Haven, CT, USA.
- July 2016 **Parameterized Verification of Liveness of Distributed Algorithms**, Amazon, New York City, NY, USA.

Other Talks

- October 2019 **Verification of Randomized Consensus Algorithms under Round-Rigid Adversaries**, joint work with Nathalie Bertrand, Igor Konnov, and Josef Widder. The 6th Workshop on Formal Reasoning in Distributed Algorithms (FRIDA 2019), Budapest, Hungary.
- August 2019 **Verification of Randomized Consensus Algorithms under Round-Rigid Adversaries**, joint work with Nathalie Bertrand, Igor Konnov, and Josef Widder. The 30th International Conference on Concurrency Theory (CONCUR 2019), Amsterdam, The Netherlands.
- April 2018 **Synthesis of Distributed Algorithms with Parameterized Threshold Guards**, University of Novi Sad, Serbia.
- December 2017 **Synthesis of Distributed Algorithms with Parameterized Threshold Guards**, The 2nd Winter School in Engineering and Computer Science on Formal Verification (student spotlight), Jerusalem, Israel.
- January 2017 **A Short Counterexample Property for Safety and Liveness Verification of Fault-tolerant Distributed Algorithms**, joint work with Igor Konnov, Helmut Veith, and Josef Widder. The 44th ACM SIGPLAN Symposium on Principles of Programming Languages (POPL 2017), Paris, France.

- May 2016 **Completeness of Bounded Model Checking of Threshold-Based Distributed Algorithms: Safety and Liveness**, joint work with Igor Konnov, Helmut Veith, and Josef Widder. The Third Workshop on Formal Reasoning in Distributed Algorithms (FRIDA 2016), Marrakech, Morocco.
- February 2015 **On terms in 3-supernilpotent groups with an additional unary operation**, joint work with Erhard Aichinger, and Nebojša Mudrinski. The 89th Workshop on General Algebra (89. Arbeitstagung Allgemeine Algebra, AAA89), Dresden, Germany.
- February 2014 **On a class of finite modular congruence lattices**, joint work with Erhard Aichinger, and Nebojša Mudrinski. The 87th Workshop on General Algebra (87. Arbeitstagung Allgemeine Algebra, AAA87), Linz, Austria.

Research Visits

- Sep 2018 **Sergio Rajsbaum**, *Universidad Nacional Autónoma de México*, Mexico City.
- Jun-Jul 2017 **Yoram Moses**, *Technion, Israel Institute of Technology*, Haifa, Israel.
- Nov-Dec 2017
- Oct-Dec 2016 **Prakash Panangaden and Vijay D'Silva**, *Simons Institute for the Theory of Computing, University of California, Berkeley*.
- Jun-Aug 2014 **Erhard Aichinger**, *Johannes Kepler University*, Linz, Austria.
- Jan-Feb 2014
- May-Jun 2013

Awards and Grants

- Female promotion measure "Doktorandinnen ans Rednerpult", travel grant for attending Dagstuhl Seminar 18211, May 2018
- Travel Grants for attending GETCO 2018, FLoC 2018, CAV & VMW 2016, AAA89
- Travel Grant by Amazon for attending LICS 2016 and LMW 2016
- Zonta Club Wien 1 mobility grant for female researchers, 2016
- Relocation Grant by FFG, February 2015
- Grant of Serbian Ministry of Education, Science and Technological Development for PhD students for the school year 2012/2013
- Grant of Serbian Ministry of Education for the school years 2011/2012, 2010/2011, 2009/2010, 2008/2009

Scientific Services

- Program committee member at CONCUR 2020
- Reviewer for Acta Informatica
- Reviewer for CONCUR 2018/2017, FMCAD 2018/2017, PSSV 2018/2017, STACS 2017, ICDCN 2017
- Co-organizing CAV 2016 Buddy System
- Student volunteer at DISC 2017, FMCAD 2017, POPL & VMCAI 2017, CAV 2016
- Co-organizing The 90th Workshop on General Algebra (AAA90)