

# Filip Mazowiecki

## *Curriculum Vitae*

### Personal data

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<b>citizenship</b>	Polish
<b>address</b>	Domaine Universitaire, 351 cours de la liberation 33405 Talence Cedex, France
<b>e-mail</b>	filip.mazowiecki@u-bordeaux.fr
<b>homepage</b>	<a href="https://www.labri.fr/perso/fmazowiecki">https://www.labri.fr/perso/fmazowiecki</a>
<b>research interests</b>	formal verification, automata theory

### Employment

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<b>since Dec 2017</b>	Postdoc, University of Bordeaux
<b>Apr 2017 – Nov 2017</b>	Research Assistant, University of Oxford supervised by James Worrell
<b>Mar 2016 – Mar 2017</b>	Research Assistant, University of Warwick supervised by Ranko Lazić

### Education

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<b>Feb 2016</b>	PhD in computer science, University of Warsaw jointly supervised by Filip Murlak and Emanuel Kieroński
<b>2013</b>	Msc in computer science, University of Warsaw
<b>2011</b>	Msc in mathematics, University of Warsaw

### Long research visits

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<b>Aug 2016</b>	<b>Pontificia Universidad Católica de Chile</b> one month research stay with Cristian Riveros
<b>Oct 2014 – Apr 2015</b>	<b>Pontificia Universidad Católica de Chile</b> research stay with Cristian Riveros
<b>Oct 2012 – Feb 2013</b>	<b>University of Wrocław</b> research stay with Emanuel Kieroński

### My projects

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<b>2017-2019</b>	granted project “Branching vector addition systems with states” within the 2017 IdEx Bordeaux Post-Doctoral Fellowship Program
<b>2014-2016</b>	principal investigator of Poland’s National Science Center grant PRELUDIUM “Frontiers of tractability for recursive queries”

## Participation in projects

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2018-	participant in ANR project "BraVAS"
2016-2017	participant in EPSRC grant in Warwick and Oxford "Counter Automata: Verification and Synthesis"
2016	participant in Poland's National Science Center grant "Frontiers of automatic verification: new methods of analysis of infinite-state systems"
2013	participant in Poland's National Science Center grant "Decision Procedures for Verification"

## Conference publications

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- Shaul Almagor, Michaël Cadilhac, Filip Mazowiecki and Guillermo A. Pérez: Weak Cost Register Automata are Still Powerful. In DLT 2018.
- Michael Blondin, Christoph Haase and Filip Mazowiecki: Affine Extensions of Integer Vector Addition Systems with States. In CONCUR 2018.
- Laure Daviaud, Marcin Jurdziński, Ranko Lazić, Filip Mazowiecki, Guillermo A. Pérez and James Worrell: When is Containment Decidable for Probabilistic Automata? In ICALP 2018.
- Filip Mazowiecki and Cristian Riveros. Pumping lemmas for weighted automata. In STACS 2018.
- Diego Figueira, Ranko Lazić, Jérôme Leroux, Filip Mazowiecki and Grégoire Sutre: Polynomial-Space Completeness of Reachability for Succinct Branching VASS in Dimension One. In ICALP 2017.
- Lorenzo Clemente, Sławomir Lasota, Ranko Lazić and Filip Mazowiecki: Timed pushdown automata and branching vector addition systems. In LICS 2017.
- Filip Mazowiecki and Cristian Riveros. Copyless Cost-Register Automata: Structure, Expressiveness, and Closure Properties. In STACS 2016.
- Filip Mazowiecki and Cristian Riveros. Maximal partition logic: towards a logical characterization of copyless cost register automata. In CSL 2015.
- Filip Mazowiecki, Joanna Ochremiak and Adam Witkowski. Eliminating recursion from monadic datalog programs on trees. In MFCS 2015.
- Filip Mazowiecki, Filip Murlak and Adam Witkowski. Monadic Datalog and Regular Tree Pattern Queries. In MFCS 2014.
- Witold Charatonik, Emanuel Kieroński and Filip Mazowiecki. Decidability of weak logics with deterministic transitive closure. In CSL-LICS 2014.
- Saguy Benaim, Michael Benedikt, Witold Charatonik, Emanuel Kieroński, Rastislav Lenhardt, Filip Mazowiecki and James Worrell. Complexity of Two-Variable Logic on Finite Trees. In ICALP 2013.

## Journal publications

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- Filip Mazowiecki and Cristian Riveros. Copyless Cost-Register Automata: Structure, Expressiveness, and Closure Properties. Accepted to JCSS 2018.
- Saguy Benaim, Michael Benedikt, Witold Charatonik, Emanuel Kieroński, Rastislav Lenhardt, Filip Mazowiecki and James Worrell. Complexity of Two-Variable Logic on Finite Trees. In ACM TOCL 2016.
- Filip Mazowiecki, Filip Murlak and Adam Witkowski. Monadic Datalog and Regular Tree Pattern Queries. In ACM TODS 2016.

## Popular science publications

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- Filip Mazowiecki. Jak definiować ciągi rekurencyjne? Delta, November 2018.

## Student supervision

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- 2018 co-supervision of Corentin Barloy (L3)
- 2018 co-supervision of Quentin de Goër de Herve (L3)
- 2018 co-supervision of Ritam Raha (M1)

## Organization

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- since Jan 2018 co-organizer of the team seminar "Formal Methods" in LaBRI
- Jul 2018 co-organizer of "Autobóz" a workshop on automata, logic and games theory

## Refereeing

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- conferences FSTTCS, ICDT, LICS, CSL, RP, FOSSACS, MFCS, CONCUR, DLT, GANDALF
- journals LMCS, TOCS, JCSS

## Teaching

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- exercise classes Decision Procedures, Automata on Infinite Words, Introductory Programming (imperative approach)
- additional classes Introduction to mathematics

## Other

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- Jan/Jun 2014 volunteer for WIOSNA association, program AKADEMIA PRZYSZŁOŚCI
- 2011-2013 member of the PhD Students' union at the faculty of Mathematics, Informatics and Mechanics, University of Warsaw
- languages Polish (mother), English (fluent), Spanish (basic)