

# Filip Nikšić

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**Contact Information** MPI-SWS *Phone:* +49 681 9303-8912  
Paul-Ehrlich-Str. 26 *Fax:* +49 681 9303-5719  
67663 Kaiserslautern *Email:* fniksic@mpi-sws.org  
Germany *Web:* <https://people.mpi-sws.org/~fniksic/>

**Research Interests** I am interested in analysis, verification, and testing of asynchronous software systems. I like to solve theoretical problems concerning mathematical models of software, as well as build practical tools for proving correctness, finding bugs, or synthesizing correct software.

## Education

09/2012–*present* **Max Planck Institute for Software Systems (MPI-SWS)**  
Doctoral student in computer science, advised by Rupak Majumdar

10/2009–10/2011 **Department of Mathematics, University of Zagreb**  
Enrolled in a doctoral program in mathematics

07/2004–10/2009 **Department of Mathematics, University of Zagreb**  
Dipl. Ing. (4-year degree) in Mathematics (profile: Computer Science)  
Thesis: *Propositional Dynamic Logic*  
GPA: 4.7 / 5.0

## Publications

Dmitry Chistikov, Rupak Majumdar, Filip Nikšić. *Hitting Families of Schedules for Asynchronous Programs*. CAV 2016

Ivan Gavran, Filip Nikšić, Aditya Kanade, Rupak Majumdar, Viktor Vafeiadis. *Rely/Guarantee Reasoning for Asynchronous Programs*. CONCUR 2015

Sumit Gulwani, Mikaël Mayer, Filip Nikšić, Ruzica Piskac. *StriSynth: Synthesis for Live Programming*. ICSE 2015

Javier Esparza, Ruslán Ledesma-Garza, Rupak Majumdar, Philipp Meyer, Filip Nikšić. *An SMT-Based Approach to Coverability Analysis*. CAV 2014

Johannes Kloos, Rupak Majumdar, Filip Nikšić, Ruzica Piskac. *Incremental, Inductive Coverability*. CAV 2013

## Work Experience

05/2016–08/2016 **Microsoft, Redmond**  
Research intern

04/2010–09/2012 **IN2 d.o.o., Zagreb**  
Software engineer developing financial software

## Professional Service

Artifact Evaluation Committee: ISSTA 2015

External reviews: CAV 2013, CSL 2013, FMCAD 2013, EMSOFT 2014, FMCAD 2014, LICS 2014, CADE 2015, VMCAI 2015, POPL 2016, TACAS 2016, VMCAI 2017

## Technical Skills

Operating systems: GNU/Linux, Mac OS X, Windows

Programming languages: C/C++, C#, Java, Python, PL/SQL, ActionScript (Flex)

Databases: Oracle DB, MySQL