

# Mirco Giacobbe

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Born: March 27, 1988—Trento, Italy  
Nationality: Italian

## Education

- 2012 MSc in Computer Science, University of Trento
- 2012 MSc in Computer Science, RWTH Aachen University
- 2010 BSc in Computer Science, University of Trento

## Employment

- Sep 2013-present PhD student, Henzinger Group, IST Austria.  
Modeling and analysis of hybrid systems and applications in systems biology.  
Supervisor: Thomas A. Henzinger.
- Feb 2013-Aug 2013 Research Assistant, Embedded Systems Unit, FBK.  
Development of symbolic methods for the verification of infinite-state systems.  
Supervisor: Alessandro Cimatti.
- Jun 2006-Aug 2011 IT, Leonardelli s.r.l., Pergine Valsugana.  
Data management, network administration.

## Honors & awards

- 2015 Best Paper Award, ETAPS EASST
- 2013 Merit Award, University of Trento
- 2012 MSc with Distinction, University of Trento
- 2011-2012 Erasmus Mundus Scholarship, European Master in Informatics

## Internships

- Apr 2012-Nov 2012 Embedded Software Laboratory, RWTH Aachen University. Supervisor: Stefan Kowalewski.
- May 2010-Sep 2010 DISI, University of Trento. Supervisor: Fabio Casati.

## Publications

### REFEREED CONFERENCE PAPERS

- [c1] G. Frehse, M. Giacobbe, and T. A. Henzinger, “Space-time interpolants,” in *CAV (1)*, ser. Lecture Notes in Computer Science, vol. 10981, Springer, 2018, pp. 468–486.
- [c2] S. Bogomolov, G. Frehse, M. Giacobbe, and T. A. Henzinger, “Counterexample-guided refinement of template polyhedra,” in *TACAS (1)*, ser. Lecture Notes in Computer Science, vol. 10205, 2017, pp. 589–606.
- [c3] S. Bogomolov, M. Giacobbe, T. A. Henzinger, and H. Kong, “Conic abstractions for hybrid systems,” in *FORMATS*, ser. Lecture Notes in Computer Science, vol. 10419, Springer, 2017, pp. 116–132.
- [c4] M. Giacobbe, C. C. Guet, A. Gupta, T. A. Henzinger, T. Paixão, and T. Petrov, “Model checking gene regulatory networks,” in *TACAS*, ser. Lecture Notes in Computer Science, vol. 9035, Springer, 2015, pp. 469–483, ETAPS EASST Best Paper Award.
- [c5] S. Biallas, M. Giacobbe, and S. Kowalewski, “Predicate abstraction for programmable logic controllers,” in *FMICS*, ser. Lecture Notes in Computer Science, vol. 8187, Springer, 2013, pp. 123–138.

### REFEREED JOURNAL PAPERS

- [j1] R. Alur, M. Giacobbe, T. A. Henzinger, K. G. Larsen, and M. Mikučionis, “Continuous-time models for system design and analysis,” *Lecture Notes in Computer Science*, vol. 10000, To appear.
- [j2] M. Giacobbe, C. C. Guet, A. Gupta, T. A. Henzinger, T. Paixão, and T. Petrov, “Model checking the evolution of gene regulatory networks,” *Acta Inf.*, vol. 54, no. 8, pp. 765–787, 2017.

## Software Contributions

- 2013 NUXMV: a symbolic model checker for finite- and infinite-state discrete models.
- 2012 ARCADE.PLC: a verification platform for programmable logic controllers.
- 2010 LIQUIDPUB: an open paradigm for the dissemination of scientific knowledge.

## Professional Service

### TEACHING ASSISTANT

Spring 2015 Advanced Topics in Formal Methods, IST Austria

### PROGRAM COMMITTEES

- 2017 Repeatability Evaluation of Conf. on Hybrid Systems: Computation and Control (HSCC)
- 2016 Workshop on Numerical Software Verification (NSV)

## REVIEWS

Conference on Formal Modelling and Analysis of Timed Systems (FORMATS) 2017; Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS) 2016, 2017; Conference on Cyber-Physical Systems, Networks, and Applications (CPSNA) 2016; Conference of Computational Methods for Systems Biology (CMSB) 2015; Conference on Computer-Aided Verification (CAV) 2015; Workshop on Numerical Software Verification (NSV) 2015; Workshop on Quantitative Aspects of Programming Languages and Systems (QAPL) 2015;