

Mirco Giacobbe

Curriculum Vitae

Biographical data

Date of birth	27th march 1988	Address	IST Austria
Nationality	Italian		Am Campus 1
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Education

- Dec 2012 **MSc, Computer Science**, *University of Trento*.
Program in *Embedded Systems*
- Nov 2012 **MSc, Computer Science**, *RWTH Aachen University*.
Program in *Software Systems Engineering*
- Sep 2010 **BSc, Computer Science**, *University of Trento*.
- Jul 2007 **High school**, *I.d.I. Marie Curie*, Pergine Valsugana.

Employment

- Sep 2013 - current **Ph.D. student**, *Henzinger Group*, IST Austria.
Modeling and analysis of hybrid systems and applications in systems biology.
Supervisor: Prof. Thomas A. Henzinger
- Feb 2013 - Aug 2013 **Intern**, *Embedded Systems Unit*, FBK, Trento.
Develop of quantifier-elimination algorithms for the verification of infinite-state SMV models and HyDI models.
Supervisor: Prof. Alessandro Cimatti
- Apr 2012 - Nov 2012 **Intern**, *Embedded Software Laboratory*, RWTH Aachen University.
Develop of an abstraction-refinement algorithm for the verification of PLC programs
Supervisor: Prof. Stefan Kowalewski.
- Maj 2010 - Sep 2010 **Intern**, *DISI*, University of Trento.
Develop of a mobile application for the sharing of scientific knowledge.
Supervisor: Prof. Fabio Casati.
- Jun 2006 - Aug 2011 **IT**, *Leonardelli s.r.l.*, Pergine Valsugana.
Data management, network administration.

Honors

- 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

Languages

- Italian **Native proficiency**

English **Full working proficiency**
German **Elementary proficiency**

Software

The nuXmv symbolic model checker.

A symbolic model checker for the verification of finite- and infinite-state discrete models.

The Arcade.PLC verification platform.

A tool set for the verification of software for programmable logic controllers.

The LiquidPub scientific community model.

A collaborative paradigm to create, disseminate, evaluate and maintain scientific knowledge.

Academic Service

Review activity

International Conference on Formal Modelling and Analysis of Timed Systems (FORMATS) 2017; International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS) 2016, 2017; International 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;

Program committee

Workshop on Numerical Software Verification (NSV) 2016; Repeatability evaluation for HSCC 2017;

Publications

- [1] Sergiy Bogomolov, Mirco Giacobbe, Thomas A. Henzinger, and Hui Kong. Conic abstractions for hybrid systems. In *Formal Modelling and Analysis of Timed Systems (FORMATS)*, 2017.
- [2] Sergiy Bogomolov, Goran Frehse, Mirco Giacobbe, and Thomas A. Henzinger. Counterexample-guided refinement of template polyhedra. In *Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, 2017.
- [3] Mirco Giacobbe, Călin C. Guet, Ashutosh Gupta, Thomas A. Henzinger, Tiago Paixão, and Tatjana Petrov. Model checking the evolution of gene regulatory networks. *Acta Informatica*, 2016.
- [4] Mirco Giacobbe, Călin C. Guet, Ashutosh Gupta, Thomas A. Henzinger, Tiago Paixão, and Tatjana Petrov. Model checking gene regulatory networks. In *Tools and Algorithms for the Construction and Analysis of Systems (TACAS)*, 2015.
- [5] Sebastian Biallas, Mirco Giacobbe, and Stefan Kowalewski. Predicate abstraction for programmable logic controllers. In *Formal Methods for Industrial Critical Systems (FMICS)*, 2013.