Samir Genaim

Curriculum Vitae

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Contact Information

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Education

1998–2002 **Ph.D.** (summa cum laude) in Computer Science at Ben-Gurion University of the Negev, Beer-Sheva, Israel.

Thesis : Semantic Based Workbench For Termination Analysis of Logic Programs
Advisor: Prof. Michael Codish

1996–1998 **M.Sc.** (cum laude) in Mathematics and Computer Science at Ben-Gurion University of the Negev, Beer-Sheva, Israel.

1993–1996 **B.Sc.** (cum laude) in Mathematics and Computer Science at Ben-Gurion University of the Negev, Beer-Sheva, Israel.

Employment History

2008– **Profesor Contratado Doctor**, Facultad de Informática, Universidad Complutense de Madrid, Madird, Spain. Since 03/12/2008.

2006–2008 **Juan de la Cierva** researcher at the CLIP Group, Departamento de Inteligencia Artificial, Facultad de Informática, Universidad Politécnica de Madrid, Madird, Spain. From 01/02/2006 until 02/12/2008.

2005–2006 Postdoctoral researcher at the CLIP Group, Departamento de Inteligencia Artificial, Facultad de Informática, Universidad Politécnica de Madrid, Madird, Spain. From 28/03/2005 until 31/01/2006.

2003–2005 **Marie Curie** reserach fellow with Prof. Roberto Giacobazzi at the Dipartimento di Informatica, Università degli Studi di Verona, Verona, Italy. From 28/03/2003 until 27/03/2005.

1996–2002 Teaching assistant and lecturer at the Department of Computer Science, Ben-Gurion University of the Negev, Beer-Sheva, Israel – during Ph.D. and M.Sc. studies. From 01/10/1996 until 31/09/2002.

1991–1993 Software Developer at Eid Computers, Baqa El-Gharbia, Israel. Developing educational software in Arabic and Hebrew.

Fellowships, Awards, Prizes, etc.

Fellowships

2005 ⊷ **Juan de la Cierva fellowship:** *Theory and Practice of Abstract Interpretation for Program Development*. Three years postdoctoral fellowship awarded by the *Spanish Ministry of Education and Science*. From 01/02/2006 until 03/12/2008.

2003 ⊷ **Marie Curie fellowship:** *Property driven design of static program analyses* – Fellowship no. HPMF-CT-2002-01848. Two years postdoctoral fellowship, with Prof. Roberto Giacobazzi at the Dipartimento di Informatica, awarded by the *European Commission*. From 28/03/2003 until 27/03/2005.

1999 ⊷ **Eshkol Grant:** *Semantic Based Programming Environments* – Grant no. 81807301. Three years grant for doctoral studies awarded by the *Israeli Ministry of Science*. From 01/11/1998 until 31/10/2001.

1998 ⊷ **Kreitman Foundation fellowship:** Four years fellowship for doctoral studies awarded by the Kreitman Foundation. From 01/10/1998 until 30/09/2002.

Awards, Prizes, etc.

2003 ⊷ Ben-Gurion University of the Negev **Rector's Prize** for excellence in Ph.D. studies. This prize is given to only one Ph.D. student each year.

⊷ The **Knesset (Parliament of Israel) award** for excellence in Ph.D. studies.

1997 ⊷ **Intel Prize** for excellence in M.Sc. studies.

Research Interests

Keywords: Semantic-based static program analysis, Abstract interpretation, Resource usage analysis, Termination analysis.

My research expertise is in the area of formal approaches to program analysis. This includes developing program analysis tools and their underlying theory in order to statically (i.e. without execution) infer run-time properties of a given program. These tools are used for certification, verification, debugging, optimization and program development. I am also interested in the algorithmic and complexity aspects of the underlying problems.

Grants and Participation in Research Projects

Projects marked by ✪ correspond to grants in which I am a main researcher. In the rest, he is a member of the research staff.

2013 ⊷ *Envisage* – Envisage: Engineering Virtualized resources. From 1/10/2013 until 30/9/2016. Financed by the European Commission [FP7 610582].

⊷ *VIVAC* – ValIdación y Verificación de Aplicaciones Concurrentes. From 1/1/2013 until 31/12/2015. Financed by Ministro de Educación y Ciencia, España [MINECO TIN2012-38137-C02].

Grants and Participation in Research Projects (continued)

2012

- *SUPRA* – Resolución de relaciones de coste utilizando técnicas de análisis de programas. From 1/1/2012 until 31/12/2013. Deutsch & Spanish Sc Research Councils, Acciones Integradas Hispano-Alemanas.

2010

- *PROMETIDOS-CM* – Madrid Program in Rigorous Methods for the Development of Software (Programa en metodos rigurosos para el desarrollo de software de la Comunidad de Madrid) From 1/1/2010 until 31/12/2013. Financed by Comunidad de Madrid [CAM S2009TIC-1465].

2009

- *HATS* – Highly Adaptable and Trustworthy Software using Formal Methods. From 1/3/2009 until 28/2/2013. Financed by the European Commission [EU IST FET Programme. Integrated Project. Grant agreement #231620].

- *DOVES* – Development Of Verifiable and Efficient Software. From 1/1/2009 until 31/12/2013. Financed by Ministro de Educación y Ciencia, España [MEC 2008-05624/TIN].

- Acción Integrada with the Prof. Roberto Giacobazzi – Abstract Interpretation based Code Protection and Transformation. From 1/1/2009 until 31/12/2010. Financed by Ministro de Educación y Ciencia, España [HI2008-0153].

2006

- ✪ *Reasoning about Determinacy in Logic Programs*. *From 01/05/2006 until 30/04/2008*. Financed by the Royal Society, UK (Joint International Project). The project provides travel grants for Samir and Dr. Andy King to exchange visits to Universidad Politécnica de Madrid and University of Kent.

- *PROMESAS* - PROgrama en MÉtodos para el Desarrollo de Software Fiable, de Alta Calidad y Seguro. *From 01/01/2006 until 31/12/2009*. Financed by Comunidad de Madrid [CAM S-0505/TIC/0407]. The project has 2 academic partnerns, Universidad Politécnica de Madrid and Universidad Complutense de Madrid, and several industrial partners (see http://www.promesas-cm.org/). Samir is a member of the research team at Universidad Politécnica de Madrid which is leaded by Prof. Manuel Hermenegildo.

2005

- *MERIT* - MÉtodos RIgurosos para sistemas software heTerogéneos y móviles. *From 31/12/2005 until 30/12/2008*. Financed by Ministro de Educación y Ciencia, España [MEC TIN2005-09207-C03-01]. The project has 3 academic partners, Universidad Politécnica de Madrid, Universidad Complutense de Madrid and Universidad Politécnica de Valencia. Samir is a member of the research team at Universidad Politécnica de Madrid which is leaded by Prof. Manuel Hermenegildo.

- ✪ *Royal Society (UK) short visit grant* for visiting Dr. Andy King at the Computing Laboratory, University of Kent, from 12/9/2005 until 30/9/2005.

- *MOBIUS* - Mobility, Ubiquity, and Security. *From 01/09/2005 until 31/08/2009*. Financed by the European Commission [EU IST FET Programme. Integrated Project IST-15905]. The project has 13 academic partners and 3 industrial partners (see http://mobius.inria.fr). Samir is a member of the research group at Universidad Politécnica de Madrid which is leaded by Dr. Germán Puebla.

Grants and Participation in Research Projects (continued)

- *AIDA* - Abstract Interpretation Design and Applications. *From 01/01/2005 until 31/12/2006*. Financed by national Italian research funds. Collaborative project between the universities of Bologna, Padova, Parma, Pisa, Udine, Verona, Venezia. Samir is a member of the research team at Università degli Studi di Verona which is leaded by Prof. Roberto Giacobazzi.

2003

- *SPY-Mod* - Abstract Interpretation and Model Checking for the Verification of Embedded Systems *From 21/02/2003 until 20/02/2005* Financed by Ministero dell'Istruzione, dell'universita e della ricerca (ITALIA). Collaborative project between the University of Padova (ITALIA), University of Venezia (ITALIA), University of Verona (ITALIA). Samir is a member of the research team at Università degli Studi di Verona which is leaded by Prof. Roberto Giacobazzi.

2002

- *CoVeR* - Constraint-based Verification of Reactive Systems. *From 01/12/2002 until 30/11/2003*. Financed by Ministero dell'Istruzione, dell'universita e della ricerca (ITALIA). Collaborative project between the University of Bologna (ITALIA), University of Genova (ITALIA), University of Padova (ITALIA) University of Parma (ITALIA), University of Udine (ITALIA), University of Verona (ITALIA). Samir is a member of the research team at Università degli Studi di Verona which is leaded by Prof. Roberto Giacobazzi.

1998

- *RADIOWEB* - Automatic Generation of Web Sites for the Radio Broadcasting Industry. *From 01/01/1998 until 31/12/2000*. Financed by the European Commission [ESPRIT EP 25562 / CICYT TIC98-1531-CE]. The project has two academic partners, Universidad Politécnica de Madrid and Ben-Gurion University of the Negev, and one industrial partner, Dalet Digital Media Systems. Samir is project coordinator of Ben-Gurion University of the Negev team which is leaded by Prof. Michael Codish.

Professional Activities

Master Students

- Domenech
- Alicia
- Antonio E. Flores Montoya; *Analysis of May-Happen-in-Parallel in Concurrent Objects*. Universidad Complutense de Madrid. May 21, 2012.

PhD Students

- Jesus Domenech; *Termination Analysis of Programs with Complex Control-Flow*. Universidad Complutense de Madrid. January 22, 2021.
- Pablo Gordillo; *Static Analysis of Concurrent and Distributed Systems: Concurrent Objects and Ethereum Bytecode*. Universidad Complutense de Madrid. January 23, 2020.

- Diego Esteban Alonso Blas; *From Abstract Programs to Precise Asymptotic Closed-Form Bounds*. Universidad Complutense de Madrid. May 29, 2014.

- Md. Abu Naser Masud; *Termination and Cost Analysis: Complexity and Precision Issues*. Universidad Politécnica de Madrid. Feb 6, 2012.

Member of PhD Thesis Committee

- Maximiliano Klemen.*'A General Framework for Static Resource Analysis and Profiling of (Parallel) Programs and an Application to Runtime Checking*. Universidad Politécnica de Madrid. March 5, 2021.

- Pedro Valero Mejía.*On the Use of Quasiorders in Formal Language Theory*. Universidad Politécnica de Madrid. July 20, 2020.

- Pablo Cañones Martín. *On the Security of Cache Algorithms*. Universidad Politécnica de Madrid. July 1, 2019.

- Florian Frohn. *Automated Complexity Analysis of Rewrite Systems*. RWTH Aachen, Germany. December 11, 2018.

- Miriam García Soto. *An Algorithmic Approach for Stability Verification of Hybrid Systems*. Universidad Politécnica de Madrid. July, 31, 2017.

- Alberto Lovato. *Concurrency and Static Analysis*. Università degli Studi di Verona. June 5, 2017.

- Daniel Larraz. *Automatic Program Analysis using Max-SMT*. Universitat Politécnica de Catalunya. July 28, 2015.

- Marc Brockschmidt. *Termination Analysis for Imperative Programs Operating on the Heap*. RWTH Aachen, Germany. November 19, 2013.

- Diana Vanessa Ramírez Deantes. *Modular and Field-Sensitive Termination Analysis of Java Bytecode*. Universidad Politécnica de Madrid. June 3, 2011.

- Jesús Correas. *Analysis and Verification of Modular Programs*. Universidad Politécnica de Madrid. June 13, 2008.

Member in Program Committee

2020

- The 27th Static Analysis Symposium (**SAS** 2020), November 18 - 20, 2020, Chicago, USA.

- The 7th Workshop on Horn Clauses for Verification and Synthesis (**HCVS** 2020), April 26, 2020, Dublin, Ireland.

- The 14th International Conference on Verification and Evaluation of Computer and Communication Systems (**VECoS** 2020), October 26-27, 2020, Xi'an, China.

Professional Activities (continued)

2019
- Workshop on Developments in Implicit Computational complExity & Foundational & Practical Aspects of Resource Analysis (**DICE-FOPARA** 2019), April 6-7, 2019, Prague, Czech Republic.
- The 13th International Conference on Verification and Evaluation of Computer and Communication Systems (**VECoS** 2019), October 9, 2019, Porto, Portugal.

2018
- The 9th Workshop on Tools for Automatic Program Analysis (**TAPAS** 2018), August 28, 2018, Freiburg im Breisgau, Germany.
- The 16th International Workshop on Termination (**WST** 2018), July 18-19, 2018, Oxford, UK.
- The 14th International Symposium on Functional and Logic Programming (**FLOPS 2014**), May 9-11, 2018, Nagoya, Japan.

2017
- The 8th Workshop on Tools for Automatic Program Analysis (**TAPAS** 2017), August 29, 2017, New York, NY, USA.

2016
- The 6th International Workshop on Numerical and Symbolic Abstract Domains (**NSAD** 2016), September 11, 2016, Edinburgh, Scotland.
- 2016 Workshop on Exascale Multi/many Core Computing Systems (**E-MuCoCoS** 2016), June 23, 2016, Frankfurt, Germany.

2014
- The 30th International Conference on Logic Programming (**ICLP** 2014), July 19-22, Vienna, Austria.
- The 12th International Symposium on Functional and Logic Programming (**FLOPS 2014**), June 4 - 6 , 2014 Kanazawa, Japan.

2013
- ACM SIGPLAN 2013 Workshop on Partial Evaluation and Program Manipulation (**PEPM** 2013), January 20-21, 2013, Rome, Italy.
- The 14th International Conference on Verification, Model Checking, and Abstract Interpretation (**VMCAI** 2013), January 20-22, 2013, Rome, Italy.
- XII Jornadas sobre Programacion y Lenguajes (**PROLE** 2013), September 17-20, 2013, Madrid, Spain.

2012
- The 12th International Workshop on Termination (**WST** 2012), February 19-23, 2012, Obergurgl, Austria.

2011
- The 21st Workshop on Logic-based methods in Programming Environments (**WLPE** 2011), Lexington, Kentucky, July 10, 2011.
- The 27th International Conference on Logic Programming (**ICLP** 2011), Lexington, Kentucky, July 6-10, 2011.

- The 6th Workshop on Bytecode Semantics, Verification, Analysis and Transformation (**BYTECODE** 2011) March 27, 2011, Saarbrucken, Germany.

2010

- The 11th International Workshop on Termination (**WST** 2010), July 14-15, 2010, Edinburgh, Scotland..
- The Joint Workshop on Implementation of Constraint Logic Programming Systems and Logic-based Methods in Programming Environments (**CICLOPS-WLPE** 2011), July 15, 2010, Edinburgh, Scotland.
- The 26th International Conference on Logic Programming (**ICLP** 2010), Edinburgh, Scotland, U.K., July 16-19, 2010.
- The 5th International Symposium on Trustworthy Global Computing (**TGC** 2010), München, Germany, February 24-26, 2010.
- The 9th International Symposium on Memory Management (**ISMM** 2010), June 5-6, 2010, Toronto, Canada.
- The 5th Workshop on Bytecode Semantics, Verification, Analysis and Transformation (**BYTECODE** 2010) March 27-28, 2010, Paphos, Cyprus.

2009

- The 4th Workshop on Bytecode Semantics, Verification, Analysis and Transformation (**BYTECODE** 2009) March 29, 2009, York, UK. Program Chair.

2008

- The 4th International Workshop on Programming Language Interference and Dependence (**PLID** 2008), July 15, 2008, Valencia, Spain. Program Chair.

2007

- The 3rd International Workshop on Programming Language Interference and Dependence (**PLID** 2007), August 21, 2007, Kongens Lyngby, Denmark.
- The 9th International Workshop on Termination (**WST** 2007), June 29, 2007, Paris, France.
- The 2nd Workshop on Bytecode Semantics, Verification, Analysis and Transformation (**BYTECODE**) March 31, 2007, Braga, Portugal.
- ACM 2007 Symposium on Applied Computing, Technical Track on Software Verification (**SAC**), March 11-15, 2007, Seoul, Korea.

Referee for Journals

- Journal of Automated Reasoning (JAR)
- Theory and Practice of Logic Programming (TPLP)
- New Generation Computing (NGC)
- ACM Transactions in Programming Languages and Systems (TOPLAS)
- Logical Methods in Computer Sience (LMCS)
- Journal of Functional Programming (JFP)
- Science of Computer Programming (SCP)

Professional Activities (continued)

Referee for Conferences and Workshops (in which I am not a PC member)

2016 ESOP'16

2015 SAS'15, SODA'15, PEPM'15

2014 POPL'14, ESOP'14, FOSSACS'14, SAS'14, ISAAC'14, TASE'14

2013 POPL'13, PADL'13, ESOP'13

2012 LPAR-18, ESOP'12, ICLP'12

2011 POPL'11, LOPSTR'11, RTA'11, PPPJ'11, FM'11, TACAS'11

2010 SAS'10, SCAM'10, LPAR'10, PEPM'10

2009 VMCAI'09

2008 SAC'08, SAS'08, PPDP'08, LOPSTR'08, CP'08, AMAST'08, ESOP'08, ICLP'08, LPAR'08, PROLE'08, VMCAI'08, WLPE'08, WRS'08

2007 PEPM'07, ICLP'07, SAS'07, PROLE'07, WST'07

2006 FLOPS'06, PPDP'06, LOPSTR'06

2005 CAV'05, LPAR'05, SAS'05, TACAS'05, VMCAI'05

2004 SAS'04

2003 APLAS'03, LOPSTR'03

2002 SAS'02

Evaluation of Research Projects

2012 German-Israeli Foundation for Scientific Research and Development (GIF)
2011 The University of Verona, Joint Research Projects
2011 The Israel Science Foundation, on the Individual Research Grants

Publications

All publications are available on-line from http://samir.loopkiller.com

Journal Publications

- Elvira Albert, Samir Genaim, Raúl Gutiérrez, and Enrique Martin-Martin. A Transformational Approach to Resource Analysis with Typed-norms Inference. *Theory and Practice of Logic Programming*, 20(3):310–357, 2020.
  DOI: 10.1017/S1471068419000401

Publications (continued)

- Jesús J. Doménech, John P. Gallagher, and Samir Genaim. Control-Flow Refinement by Partial Evaluation, and its Application to Termination and Cost Analysis. *Theory and Practice of Logic Programming*, 19(5-6):990–1005, 2019.
  DOI: 10.1017/S1471068419000310
- Elvira Albert, Antonio Flores-Montoya, Samir Genaim, and Enrique Martin-Martin. Rely-Guarantee Termination and Cost Analyses of Loops with Concurrent Interleavings. *Journal of Automated Reasoning*, 59(1):47–85, 2017.
  DOI: 10.1007/s10817-016-9400-6
- Elvira Albert, Richard Bubel, Samir Genaim, Reiner Hähnle, Germán Puebla, and Guillermo Román-Díez. A Formal Verification Framework for Static Analysis - As well as its instantiation to the resource analyzer COSTA and formal verification tool KeY. *Software and Systems Modeling*, 15(4):987–1012, 2016.
  DOI: 10.1007/s10270-015-0476-y
- Elvira Albert, Antonio Flores-Montoya, Samir Genaim, and Enrique Martin-Martin. May-Happen-in-Parallel Analysis for Actor-based Concurrency. *ACM Transactions on Computational Logic*, 17(2):11:1–11:39, 2016.
  DOI: 10.1145/2824255
- Elvira Albert, Puri Arenas, Jesús Correas, Samir Genaim, Miguel Gómez-Zamalloa, Germán Puebla, and Guillermo Román-Díez. Object-Sensitive Cost Analysis for Concurrent Objects. *Software Testing, Verification and Reliability*, 25(3):218–271, 2015.
  DOI: 10.1002/stvr.1569
- Elvira Albert, Puri Arenas, Samir Genaim, and Germán Puebla. A Practical Comparator of Cost Functions and Its Applications. *Science of Computer Programming*, 111(3):483–504, 2015.
  DOI: 10.1016/j.scico.2014.12.001
- Damiano Zanardini and Samir Genaim. Inference of Field-Sensitive Reachability and Cyclicity. *ACM Transactions on Computational Logic*, 15(4):33:1–33:41, September 2014.
  DOI: 10.1145/2629478
- Amir M. Ben-Amram and Samir Genaim. Ranking Functions for Linear-Constraint Loops. *Journal of the ACM*, 61(4):26:1–26:55, 2014.
  DOI: 10.1145/2629488
- Elvira Albert, Puri Arenas, Samir Genaim, Germán Puebla, and Guillermo Román-Díez. Conditional Termination of Loops over Heap-allocated Data. *Science of Computer Programming*, 92:2–24, 2014. Special issue on Bytecode 2012.
  DOI: 10.1016/j.scico.2013.04.006
- Samir Genaim and Damiano Zanardini. Reachability-based Acyclicity Analysis by Abstract Interpretation. *Theoretical Computer Science*, 474:60–79, 2013.
  DOI: 10.1016/j.tcs.2012.12.018
- Elvira Albert, Samir Genaim, and Miguel Gómez-Zamalloa. Heap Space Analysis for Garbage Collected Languages. *Science of Computer Programming*, 78(9):1427–1448, 2013.
  DOI: 10.1016/j.scico.2012.10.008
- Elvira Albert, Samir Genaim, and Abu Naser Masud. On the Inference of Resource Usage Upper and Lower Bounds. *ACM Transactions on Computational Logic*, 14(3):22:1–22:35, 2013.
  DOI: 10.1145/2499937.2499943
- Amir M. Ben-Amram, Samir Genaim, and Abu Naser Masud. On the Termination of Integer Loops. *ACM Transactions on Programming Languages and Systems*, 34(4):16:1–16:24, 2012.
  DOI: 10.1145/2400676.2400679
- Elvira Albert, Puri Arenas, Samir Genaim, Germán Puebla, and Damiano Zanardini. Cost Analysis of Object-Oriented Bytecode Programs. *Theoretical Computer Science*, 413(1):142–159, 2012.
  DOI: 10.1016/j.tcs.2011.07.009

- Elvira Albert, Puri Arenas, Samir Genaim, and Germán Puebla. Closed-Form Upper Bounds in Static Cost Analysis. *Journal of Automated Reasoning*, 46(2):161–203, 2011.
  DOI: 10.1007/s10817-010-9174-1
- Samir Genaim and Andy King. Inferring non-Suspension Conditions for Logic Programs with Dynamic Scheduling. *ACM Transactions on Computational Logic*, 9(3):17:1–17:43, 2008.
  DOI: 10.1145/1352582.1352585
- Maurice Bruynooghe, Michael Codish, John P. Gallagher, Samir Genaim, and Wim Vanhoof. Termination Analysis of Logic Programs through Combination of Type-based Norms. *ACM Transactions on Programming Languages and Systems*, 29(2):10:1–10:44, 2007.
  DOI: 10.1145/1216374.1216378
- Samir Genaim and Michael Codish. Inferring Termination Conditions for Logic Programs using Backwards Analysis. *Theory and Practice of Logic Programming*, 5(1-2):75–91, 2005.
  DOI: 10.1017/S1471068404002236
- Samir Genaim, Jacob M. Howe, and Michael Codish. Worst-case Groundness Analysis using Definite Boolean Functions. *Theory and Practice of Logic Programming*, 1(5):611–615, 2001.
  DOI: 10.1017/S1471068401001077

Conference Publications

- Elvira Albert, Samir Genaim, Enrique Martin-Martin, Alicia Merayo, and Albert Rubio. Lower-Bound Synthesis Using Loop Specialization and Max-SMT, In Alexandra Silva and K. Rustan M. Leino, editors, *Proceedings of the 33rd International Conference on Computer Aided Verification (CAV'21)*, volume 12760 of *Lecture Notes in Computer Science*, pages 863–886. Springer, 2021.
  DOI: 10.1007/978-3-030-81688-9_40
- Amir M. Ben-Amram, Jesús J. Doménech, and Samir Genaim. Multiphase-Linear Ranking Functions and Their Relation to Recurrent Sets, In Bor-Yuh Evan Chang, editor, *Proceedings of the 26th International Symposium on Static Analysis (SAS'19)*, volume 11822 of *Lecture Notes in Computer Science*, pages 459–480. Springer, 2019.
  DOI: 10.1007/978-3-030-32304-2_22
- Amir M. Ben-Amram and Samir Genaim. On Multiphase-Linear Ranking Functions, In Viktor Kuncak and Rupak Majumdar, editors, *Proceedings of the 29th International Conference on Computer Aided Verification (CAV'17)*, volume 10427 of *Lecture Notes in Computer Science*, pages 601–620. Springer, 2017.
  DOI: 10.1007/978-3-319-63390-9_32
- Jesús Doménech, Samir Genaim, Einar Broch Johnsen, and Rudolf Schlatte. EasyInterface: A Toolkit for Rapid Development of GUIs for Research Prototype Tools, In Marieke Huisman and Julia Rubin, editors, *Proceedings of the 20th International Conference on Fundamental Approaches to Software Engineering (FASE'17)*, volume 10202 of *Lecture Notes in Computer Science*, pages 379–383. Springer, 2017.
  DOI: 10.1007/978-3-662-54494-5_22
- Elvira Albert, Samir Genaim, and Pablo Gordillo. May-Happen-in-Parallel Analysis with Returned Futures, In Deepak D'Souza and K.Narayan Kumar, editors, *Proceedings of the 15th International Symposium on Automated Technology for Verification and Analysis (ATVA'17)*, volume 10482 of *Lecture Notes in Computer Science*, pages 42–58. Springer, 2017.
  DOI: 10.1007/978-3-319-68167-2_3

Publications (continued)

- Elvira Albert, Antonio Flores-Montoya, and Samir Genaim. May-Happen-in-Parallel Analysis with Condition Synchronization, In Marko C. J. D. van Eekelen and Ugo Dal Lago, editors, *Proceedings of the 4th International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'15), Revised Selected Papers*, volume 9964 of *Lecture Notes in Computer Science*, pages 1–19, 2016.
  DOI: 10.1007/978-3-319-46559-3_1
- Pierre Ganty, Samir Genaim, Ratan Lal, and Pavithra Prabhakar. From Non-Zenoness Verification to Termination, In *Proceedings of the 13th ACM/IEEE International Conference on Formal Methods and Models for Codesign (MEMOCODE'2015)*, pages 228–237. IEEE, 2015.
  DOI: 10.1109/MEMCOD.2015.7340490
- Elvira Albert, Samir Genaim, and Pablo Gordillo. May-Happen-in-Parallel Analysis for Asynchronous Programs with Inter-Procedural Synchronization, In Sandrine Blazy and Thomas Jensen, editors, *Proceedings of the 22nd International Symposium on Static Analysis (SAS'15)*, volume 9291 of *Lecture Notes in Computer Science*, pages 72–89. Springer, 2015.
  DOI: 10.1007/978-3-662-48288-9_5
- Elvira Albert, Puri Arenas, Jesús Correas, Samir Genaim, Miguel Gómez-Zamalloa, Enrique Martin-Martin, Germán Puebla, and Guillermo Román-Díez. Rsource Analysis: From Sequential to Concurrent and Distributed Programs, In Nikolaj Bjørner and Frank D. de Boer, editors, *Proceedings of the 20th International Symposium on Formal Methods (FM'15)*, volume 9109 of *Lecture Notes in Computer Science*, pages 3–17. Springer, 2015.
  DOI: 10.1007/978-3-319-19249-9_1
- Amir M. Ben-Amram and Samir Genaim. Complexity of Bradley-Manna-Sipma Lexicographic Ranking Functions, In Daniel Kroening and Corina Pasareanu, editors, *Proceedings of the 27th International Conference on Computer Aided Verification (CAV'15)*, volume 9207 of *Lecture Notes in Computer Science*, pages 304–321. Springer, July 2015.
  DOI: 10.1007/978-3-319-21668-3_18
- Erika Ábrahám, Costas Bekas, Ivona Brandic, Samir Genaim, Einar Broch Johnsen, Ivan Kondov, Sabri Pllana, and Achim Streit. Preparing HPC Applications for Exascale: Challenges and Recommendations, In Leonard Barolli, Makoto Takizawa, Hui-Huang Hsu, Tomoya Enokido, and Fatos Xhafa, editors, *Proceedings of the 18th International Conference on Network-Based Information Systems (NBis'15)*, pages 401–406. IEEE Computer Society, 2015.
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