

Complete list of publications

Pierre Ganty

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Conference Publications

- [1] Pierre Ganty, Radu Iosif, and Filip Konečný. Underapproximation of procedure summaries for integer programs. In *TACAS '13: Proc. 19th Int. Conf. on Tools and Algorithms for the Construction and Analysis of Systems*, LNCS. Springer, 2013.
- [2] Javier Esparza, Pierre Ganty, and Rupak Majumdar. A perfect model for bounded verification. In *LICS '12: Proc. 27th Annual ACM/IEEE Symp. on Logic in Computer Science*, pages 285–294. IEEE Computer Society Press, 2012.
- [3] Mohamed Faouzi Atig and Pierre Ganty. Approximating petri net reachability along context-free traces. In *FSTTCS '11: Proc. 31st IARCS Annual Conf. on Foundation of Software Technology and Theoretical Computer Science*, volume 13 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 152–163. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2011.
- [4] Laura Bozzelli and Pierre Ganty. Complexity analysis of the backward coverability algorithm for vass. In *RP '11: Proc. 5th Workshop on Reachability Problems*, volume 6945 of *LNCS*, pages 96–109. Springer, 2011.
- [5] Javier Esparza and Pierre Ganty. Complexity of pattern-based verification for multithreaded programs. In *POPL '11: Proc. 38th ACM SIGACT-SIGPLAN Symp. on Principles of Programming Languages*, pages 499–510. ACM Press, 2011.
- [6] Pierre Ganty, Benjamin Monmege, and Rupak Majumdar. Bounded underapproximations. In *CAV '10: Proc. 20th Int. Conf. on Computer Aided Verification*, volume 6174 of *LNCS*, pages 600–614. Springer, 2010.
- [7] Pierre Ganty and Rupak Majumdar. Analyzing real-time event-driven programs. In *FORMATS '09: Proc. 7th Int. Conf. on Formal Modelling and Analysis of Timed Systems*, volume 5813 of *LNCS*, pages 164–178. Springer, 2009.
- [8] Pierre Ganty, Nicolas Maquet, and Jean-François Raskin. Fixpoint guided abstraction refinement for alternating automata. In *CIAA '09: Proc. 14th Int. Conf. on Implementation and Application of Automata*, volume 5642 of *LNCS*, pages 155–164. Springer, 2009.

- [9] Pierre Ganty, Rupak Majumdar, and Andrey Rybalchenko. Verifying liveness for asynchronous programs. In *POPL '09: Proc. 36th ACM SIGACT-SIGPLAN Symp. on Principles of Programming Languages*, pages 102–113. ACM Press, 2009.
- [10] Patrick Cousot, Pierre Ganty, and Jean-François Raskin. Fixpoint-guided abstraction refinements. In *SAS '07: Proc. 14th Int. Static Analysis Symp.*, volume 4634 of *LNCS*, pages 333–348. Springer, 2007.
- [11] Pierre Ganty, Jean-François Raskin, and Laurent Van Begin. From many places to few: Automatic abstraction refinement for Petri nets. In *ICATPN '07: Proc. of 28th Int. Conf. on Application and Theory of Petri Nets and Other Models of Concurrency*, volume 4546 of *LNCS*, pages 124–143. Springer, 2007.
- [12] Pierre Ganty, Jean-François Raskin, and Laurent Van Begin. A complete abstract interpretation framework for coverability properties of WSTS. In *VMCAI '06: Proc. 7th Int. Conf. on Verification, Model Checking and Abstract Interpretation*, volume 3855 of *LNCS*, pages 49–64. Springer, 2006.
- [13] Javier Esparza, Pierre Ganty, and Stefan Schwoon. Locality-based abstractions. In *SAS '05: Proc. 12th Int. Static Analysis Symp.*, volume 3672 of *LNCS*, pages 118–134. Springer, 2005.
- [14] Giorgio Delzanno and Pierre Ganty. Automatic verification of time sensitive cryptographic protocols. In *TACAS '04: Proc. 11th Int. Conf. on Tools and Algorithms for the Construction and Analysis of Systems*, volume 2988 of *LNCS*, pages 342–356. Springer, 2004.
- [15] Pierre Ganty and Laurent Van Begin. Non Deterministic Automata for the Efficient Representation of Infinite-state Systems. In *CP+CV '04: Proc. 1st workshop on Constraint Programming and Constraints for Verification*, 2004.
- [16] Giorgio Delzanno and Pierre Ganty. Symbolic methods for automatically proving secrecy and authentication in infinite-state models of cryptographic protocols. In *WISP '03: Proc. 1st Int. Workshop on Issues in Security and Petri Nets*, pages 85–99, 2003.
- [17] Alessandro Armando, Luca Compagna, and Pierre Ganty. SAT-based model-checking of security protocols using planning graph analysis. In *FM '03: Proc. 12th Int. Formal Methods Europe Symp.*, volume 2805 of *LNCS*, pages 875–893. Springer, 2003.
- [18] Pierluigi Ammirati, Giorgio Delzanno, Pierre Ganty, Gilles Geeraerts, Jean-François Raskin, and Laurent Van Begin. Babylon: An integrated tool for the specification and verification of parametrized systems. In *SAVE '02: Proc. 2nd Workshop on Specification, Analysis and Validation for Emerging technologies*, 2002.

Journal Publications

- [1] Pierre Ganty and Rupak Majumdar. Algorithmic verification of asynchronous programs. *ACM Trans. Program. Lang. Syst.*, 34(1):6:1–6:48, 2012.
- [2] Pierre Ganty, Rupak Majumdar, and Benjamin Monmege. Bounded underapproximations. *Formal Methods in System Design*, 40(2):206–231, 2012.
- [3] Javier Esparza, Pierre Ganty, Stefan Kiefer, and Michael Luttenberger. Parikh’s theorem: A simple and direct automaton construction. *Information Processing Letters*, 111:614–619, 2011.
- [4] Pierre Ganty, Nicolas Maquet, and Jean-François Raskin. Fixed point guided abstraction refinement for alternating automata. *Theor. Comput. Sci.*, 411(38-39):3444–3459, 2010.
- [5] Pierre Ganty, Gilles Geeraerts, Jean-François Raskin, and Laurent Van Begin. Le problème de couverture pour les réseaux de Petri: résultats classiques et développements récents. *Techniques et Sciences Informatiques*, 28(9):1107–1142, 2009.
- [6] Pierre Ganty, Jean-François Raskin, and Laurent Van Begin. From many places to few: Automatic abstraction refinement for Petri nets. *Fundamenta Informaticae*, 88(3):275–305, 2008.

Theses

- [1] Pierre Ganty. *The Fixpoint Checking Problem: An Abstraction Refinement Perspective*. PhD thesis, Université Libre de Bruxelles, 2007.
- [2] Pierre Ganty. Automatic verification of time sensitive cryptographic protocols. DEA thesis, Université Libre de Bruxelles, 2004.
- [3] Pierre Ganty. Algorithmes et structures de données efficaces pour la manipulation de contraintes sur les intervalles (in french). Master’s thesis, Université Libre de Bruxelles, Belgium, 2002.

Others

- [1] Pierre Ganty, Radu Iosif, and Filip Konečný. Underapproximation of procedure summaries for integer programs. *CoRR*, abs/1210.4289, 2012.
- [2] Javier Esparza, Pierre Ganty, and Rupak Majumdar. A perfect model for bounded verification. *CoRR*, abs/1201.3194, 2012.
- [3] Mohamed Faouzi Atig and Pierre Ganty. Approximating petri net reachability along context-free traces. *CoRR*, abs/1105.1657, 2011.
- [4] Javier Esparza, Pierre Ganty, Stefan Kiefer, and Michael Luttenberger. Parikh’s theorem: A simple and direct automaton construction. *CoRR*, abs/1006.3825, 2010.

- [5] Pierre Ganty and Rupak Majumdar. Algorithmic verification of asynchronous programs. *CoRR*, abs/1011.0551, 2010.
- [6] Pierre Ganty, Rupak Majumdar, and Benjamin Monmege. Bounded under-approximations. *CoRR*, abs/0809.1236, 2009.
- [7] Pierre Ganty, Cédric Meuter, Giorgio Delzanno, Gabriel Kalyon, Jean-François Raskin, and Laurent Van Begin. Symbolic data structure for sets of k -uples. Technical Report 570, Université Libre de Bruxelles, Belgium, 2007.
- [8] Pierre Ganty, Jean-François Raskin, and Laurent Van Begin. From many places to few: Automatic abstraction refinement for petri nets. Technical Report 2007.77, Centre Fédéré en Vérification (CFV), 2007.
- [9] Pierre Ganty, Jean-François Raskin, and Laurent Van Begin. A complete abstract interpretation framework for coverability properties of WSTS. Technical Report 2006.57, Centre Fédéré en Vérification (CFV), 2006.
- [10] Javier Esparza, Pierre Ganty, and Stefan Schwoon. Locality-based abstractions. Technical Report 2005.50, Centre Fédéré en Vérification (CFV), 2005.