Gerardo Schneider's List of Publications

Edited Books and Journals[1,2]

1. Gilles Barthe, Alberto Pardo, and Gerardo Schneider, editors. *Software Engineering and Formal Methods*, volume 14 of *Journal of Software and System Modeling (SoSyM)*. Springer, February 2015.
2. Gilles Barthe, Alberto Pardo, and Gerardo Schneider, editors. *Software Engineering and Formal Methods*, volume 7041 of *Lecture Notes in Computer Science*. Springer, November 2011.
3. Antonio Brogi and Gerardo Schneider, editors. *Special Section: Formal Languages and Analysis of Contract-Oriented Software (FLACOS'10)*, volume 81(2) of *Journal of Logic and Algebraic Programming*. Elsevier, February 2012.
4. Einar B. Johnsen, Olaf Owe, and Gerardo Schneider, editors. *Special Issue: The 19th Nordic Workshop on Programming Theory (NWPT 2007)*, volume 78(7) of *Journal of Logic and Algebraic Programming*. Elsevier, August/September 2009.
5. Olaf Owe and Gerardo Schneider, editors. *Special Issue: Formal Languages and Analysis of Contract-Oriented Software (FLACOS'07)*, volume 78(5) of *Journal of Logic and Algebraic Programming*. Elsevier, May/June 2009.
6. Gordon Pace and Gerardo Schneider, editors. *Special Issue: Formal Languages and Analysis of Contract-Oriented Software*, volume 80(3-5) of *Journal of Logic and Algebraic Programming*. Elsevier, April-July 2011.
7. Gordon Pace and Gerardo Schneider, editors. *Special Issue: Formal Languages and Analysis of Contract-Oriented Software (FLACOS'08)*, volume 80(1) of *Journal of Logic and Algebraic Programming*. Elsevier, January 2011.

Journal Papers

1. Gerardo Schneider. Computing invariance kernels of polygonal hybrid systems. *Nordic Journal of Computing*, 11(2):194–210, 2004.
2. Eugene Asarin, Gerardo Schneider, and Sergio Yovine. Algorithmic Analysis of Polygonal Hybrid Systems. Part I: Reachability. *Theoretical Computer Science*, 379(1-2):231–265, 2007.
3. Eugene Asarin, Gordon Pace, Gerardo Schneider, and Sergio Yovine. Algorithmic Analysis of Polygonal Hybrid Systems. Part II: Phase Portrait and Tools. *Theoretical Computer Science*, 390(1):1–26, January 2008.
4. Eugene Asarin, Venkatesh Mysore, Amir Pnueli, and Gerardo Schneider. Low dimensional hybrid systems - decidable, undecidable, don't know. *Information and Computation*, 211:138–159, January 2012.
5. Cristian Prisacariu and Gerardo Schneider. A dynamic deontic logic for complex contracts. *Journal of Logic and Algebraic Programming*, 81(4):458–490, May 2012.
6. Krasimir Angelov, John J. Camilleri, and Gerardo Schneider. A framework for conflict analysis of normative texts written in controlled natural language. *Journal of Logic and Algebraic Programming*, 82(5-7):216–240, July-October 2013.
7. Hallstein Hansen, Gerardo Schneider, and Martin Steffen. Reachability analysis of complex planar hybrid systems. *Science of Computer Programming (SCP)*, 78(12):2511–2536, 2013.
8. Gregorio Díaz, M. Emilia Cambronero, Enrique Martínez, and Gerardo Schneider. Specification and Verification of Normative texts using C-O Diagrams. *IEEE Transactions on Software Engineering*, 40(8):795–817, 2014.
9. Shaun Azzopardi, Gordon J. Pace, Fernando Schapachnik, and Gerardo Schneider. Contract Automata: An Operational View of Contracts Between Interactive Parties. *Artificial Intelligence and Law*, 24(3):203–243, September 2016.
10. Wolfgang Ahrendt, Mauricio Chimento, Gordon Pace, and Gerardo Schneider. Verifying Data- and Control-Oriented Properties Combining Static and Runtime Verification: Theory and Tools. *Formal Methods in System Design*, 51(1):200–265, August 2017.
11. John J. Camilleri and Gerardo Schneider. Modelling and analysis of normative documents. *Journal of Logical and Algebraic Methods in Programming*, 91:33–59, October 2017.
12. Raúl Pardo, Musard Balliu, and Gerardo Schneider. Formalising privacy policies in social networks. *Journal of Logical and Algebraic Methods in Programming*, 90:125–157, August 2017.

Refereed Contributions in Conference and Workshops Proceedings (peer-reviewed)

1. Gerardo Schneider and Xu Qiwen. Towards a formal semantics of verilog using duration calculus. In *5th International Symposium on Formal Techniques in Real-Time and Fault-Tolerant Systems (FTRTFT'98)*, number 1486 in LNCS, pages 282–293, Lyngby, Denmark, September 1998. Springer Verlag.

2. Gerardo Lafferriere, George J. Pappas, Gerardo Schneider, and Sergio Yovine. Parameter synthesis in robot motion planning using symbolic reachability computation. In *Proceedings of 8th IEEE Mediterranean Conference on Control and Automation*, Rio, Greece, July 2000.

3. Eugene Asarin, Gerardo Schneider, and Sergio Yovine. On the decidability of the reachability problem for planar differential inclusions. In *4th International Workshop on Hybrid Systems: Computation and Control (HSCC'01)*, number 2034 in LNCS, pages 89–104, Rome, Italy, 2001. Springer-Verlag.

4. Eugene Asarin, Gordon Pace, Gerardo Schneider, and Sergio Yovine. SPeeDI: a verification tool for polygonal hybrid systems. In *Computer Aided Verification (CAV'02)*, volume 2404 of *LNCS*, pages 354–358, Copenhagen, Denmark, July 2002. Springer-Verlag.

5. Eugene Asarin and Gerardo Schneider. Widening the boundary between decidable and undecidable hybrid systems. In *13th International Conference on Concurrency Theory (CONCUR'02)*, volume 2421 of *LNCS*, pages 193–208, Brno, Czech Republic, August 2002. Springer-Verlag.

6. Eugene Asarin, Gerardo Schneider, and Sergio Yovine. Towards computing phase portraits of polygonal differential inclusions. In *5th International Workshop on Hybrid Systems: Computation and Control (HSCC'02)*, number 2289 in LNCS, pages 49–61, Stanford, USA, March 2002. Springer-Verlag.

7. Gordon Pace and Gerardo Schneider. Model checking polygonal differential inclusions using invariance kernels. In *5th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI'04)*, number 2937 in LNCS, pages 110–121, Venice, Italy, December 2003. Springer Verlag.

8. Pablo Giambiagi, Gerardo Schneider, and Frank D. Valencia. On the expressiveness of infinite behavior and name scoping in process calculi. In *Foundations of Software Science and Computation Structures (FOSSACS'04)*, volume 2987 of *LNCS*, pages 226–240, Barcelone, Spain, March 2004. Springer-Verlag.

9. Gilles Barthe, Mariela Pavlova, and Gerardo Schneider. Precise analysis of memory consumption using program logics. In *3rd IEEE International Conference on Software Engineering and Formal Methods (SEFM'05)*, pages 86–95, Koblenz, Germany, September 2005. IEEE Computer Society.

10. David Cachera, Thomas Jensen, David Pichardie, and Gerardo Schneider. Certified memory usage analysis. In *Formal Methods (FM'05)*, volume 3582 of *LNCS*, pages 91–106, Newcastle Upon Tyne, UK, July 2005. Springer-Verlag.

11. Pablo Giambiagi and Gerardo Schneider. Memory consumption analysis of java smart cards. In *Proceedings of CLEI'05*, Cali, Colombia, October 2005.

12. Pablo Giambiagi, Olaf Owe, Anders P. Ravn, and Gerardo Schneider. Language-based support for service oriented architectures: Future directions. In *International Conference on Software and Data Technologies (ICSOFT'06)*, pages 339–344, Setúbal, Portugal, September 2006. INSTICC Press.

13. Einar B. Johnsen, Gerardo Schneider, and Øystein Torget. Runtime validation of communication histories. In *IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP'06)*, pages 161–168, Cluj-Napoca, Romania, September 2006. U.T.Press.

14. Gordon Pace and Gerardo Schneider. Static analysis for state-space reduction of polygonal hybrid systems. In *4th International Conference on Formal Modelling and Analysis of Timed Systems (FORMATS'06)*, volume 4202 of *LNCS*, pages 306–321, Paris, France, September 2006. Springer-Verlag.

15. Gordon J. Pace and Gerardo Schneider. A compositional algorithm for parallel model checking of polygonal hybrid systems. In *3rd International Colloquium on Theoretical Aspects of Computing (ICTAC'06)*, volume 4281 of *LNCS*, pages 168–182, Tunis, Tunisia, November 2006. Springer-Verlag.

16. Johs H. Hammer and Gerardo Schneider. On the definition and policies of confidentiality. In *3rd International Symposium on Information Assurance and Security (IAS'07)*, pages 337–342, Manchester, UK, August 2007. IEEE Computer Society Press.

17. Olaf Owe, Gerardo Schneider, and Martin Steffen. Components, objects, and contracts. In *6th Workshop on Specification And Verification of Component-Based Systems (SAVCBS'07)*, ACM Digital Library, pages 95–98, Dubrovnik, Croatia, September 2007.

18. Olaf Owe, Gerardo Schneider, and Arild Torjusen. Towards integration of XML in the Creol object-oriented language. In *NIK'07 proceedings*, pages 107–111. Tapir Akademisk Forlag, 2007.

19. Gordon Pace, Cristian Prisacariu, and Gerardo Schneider. Model checking contracts –a case study. In *5th International Symposium on Automated Technology for Verification and Analysis (ATVA'07)*, volume 4762 of *LNCS*, pages 82–97, Tokyo, Japan, October 2007. Springer-Verlag.

20. Cristian Prisacariu and Gerardo Schneider. A formal language for electronic contracts. In *9th IFIP International Conference on Formal Methods for Open Object-Based Distributed Systems (FMOODS'07)*, volume 4468 of *LNCS*, pages 174–189, Paphos, Cyprus, June 2007. Springer.

21. Marcel Kyas, Cristian Prisacariu, and Gerardo Schneider. Run-time monitoring of electronic contracts. In *6th International Symposium on Automated Technology for Verification and Analysis (ATVA'08)*, volume 5311 of *LNCS*, pages 397–407, Seoul, South Korea, October 2008. Springer-Verlag.

22. Gordon Pace and Gerardo Schneider. Computation and visualisation of phase portraits for model checking spdis. In *14th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'08)*, volume 4963 of *LNCS*, pages 341–345, Budapest, Hungary, March 2008. Springer-Verlag.

23. Gordon J. Pace and Gerardo Schneider. Relaxing goodness is still good. In *5th International Colloquium on Theoretical Aspects of Computing (ICTAC'08)*, volume 5160 of *LNCS*, pages 274–289, Istanbul, Turkey, September 2008.

24. Gerardo Schneider. Reachability analysis of Generalized Polygonal Hybrid Systems. In *23rd Annual ACM Symposium on Applied Computing –Software Verification track (SAC-SV'08)*, pages 327–332, Fortaleza, Brazil, March 2008. ACM.

25. Christian Colombo, Gordon J. Pace, and Gerardo Schneider. Dynamic event-based runtime monitoring of real-time and contextual properties. In *13th International Workshop on Formal Methods for Industrial Critical Systems (FMICS'08)*, volume 5596 of *LNCS*, pages 135–149, L'Aquila, Italy, September 2009. Springer-Verlag.

26. Christian Colombo, Gordon J. Pace, and Gerardo Schneider. LARVA — Safer Monitoring of Real-Time Java Programs (Tool Paper). In *7th IEEE International Conference on Software Engineering and Formal Methods (SEFM'09)*, pages 33–37, Hanoi, Vietnam, 23–27 November 2009. IEEE Computer Society.

27. Christian Colombo, Gordon J. Pace, and Gerardo Schneider. Safe runtime verification of real-time properties. In *The 7th International Conference on Formal Modelling and Analysis of Timed Systems (FORMATS'09)*, volume 5813 of *LNCS*, pages 103–117, Budapest, Hungary, 13-16 September 2009. Springer.

28. Stephen Fenech, Joseph Okika, Gordon J. Pace, Anders P. Ravn, and Gerardo Schneider. On the specification of full contracts. In *6th International Workshop on Formal Engineering approaches to Software Components and Architectures (FESCA'09)*, volume 253 of *ENTCS*, pages 39–55, York, UK, March 2009.

29. Stephen Fenech, Gordon J. Pace, and Gerardo Schneider. Automatic Conflict Detection on Contracts. In *6th International Colloquium on Theoretical Aspects of Computing (ICTAC'09)*, volume 5684 of *LNCS*, pages 200–214, Kuala Lumpur, Malaysia, August 2009. Springer.

30. Stephen Fenech, Gordon J. Pace, and Gerardo Schneider. Clan: A tool for contract analysis and conflict discovery. In *7th International Symposium on Automated Technology for Verification and Analysis (ATVA'09)*, volume 5799 of *LNCS*, pages 90–96, Macao, China, October 2009. Springer.

31. Hallstein A. Hansen and Gerardo Schneider. GSPeeDI – A Verification Tool for Generalized Polygonal Hybrid Systems. In *6th International Colloquium on Theoretical Aspects of Computing (ICTAC'09)*, volume 5684 of *LNCS*, pages 336–342, Kuala Lumpur, Malaysia, August 2009. Springer.

32. Olaf Owe and Gerardo Schneider. Wrap your objects safely. In *6th International Workshop on Formal Engineering approaches to Software Components and Architectures (FESCA'09)*, volume 253 of *ENTCS*, pages 127–143, York, UK, March 2009.

33. Gordon J. Pace and Gerardo Schneider. Challenges in the specification of full contracts. In *Integrated Formal Methods (iFM'09)*, volume 5423 of *LNCS*, pages 292–306, Düseldorf, Germany, February 2009.

34. Cristian Prisacariu and Gerardo Schneider. Abstract specification of legal contracts (research abstract). In *12th International Conference on Artificial Intelligence and Law (ICAIL'09)*, pages 218–219, Barcelona, Spain, June 2009. ACM.

35. Cristian Prisacariu and Gerardo Schneider. CL: An Action-based Logic for Reasoning about Contracts. In *16th Workshop on Logic, Language, Information and Computation (WOLLIC'09)*, volume 5514 of *LNCS*, pages 335–349, Tokyo, Japan, June 2009. Springer.

36. Hallstein A. Hansen and Gerardo Schneider. Reachability Analysis of GSPDIs: Theory, Optimization, and Implementation. In *25th Annual ACM Symposium on Applied Computing –Software Verification and Testing track (SAC-SVT'10)*, pages 2511–2516, Sierre, Switzerland, March 22-26 2010. ACM.

37. Enrique Martinez, Emilia Cambronero, Gregorio Diaz, and Gerardo Schneider. A Model for Visual Specification of e-Contracts. In *The 7th IEEE International Conference on Services Computing (IEEE SCC'10)*, pages 1–8, Los Alamitos, USA, July 5-10 2010. IEEE Computer Society.

38. Enrique Martinez and Gerardo Schneider. Automated Analysis of Conflicts in Software Product Lines. In *SPLC Workshops – 1st International Workshop on Formal Methods in Software Product Line Engineering (FMSPLE'10)*, volume 2, pages 75–82. Lancaster University, September 2010.

39. Enrique Martínez, María E. Cambronero, Gregorio Díaz, and Gerardo Schneider. Timed Automata Semantics for Visual e-Contracts. In *5th International Workshop on Formal Languages and Analysis of Contract-Oriented Software (FLACOS'11)*, volume 68 of *EPTCS*, pages 7–21, Málaga, Spain, 22-23 September 2011.

40. Seyed M. Montazeri, Nivir Roy, and Gerardo Schneider. From Contracts in Structured English to CL Specifications. In *5th International Workshop on Formal Languages and Analysis of Contract-Oriented Software (FLACOS'11)*, volume 68 of *EPTCS*, pages 55–69, Málaga, Spain, 22-23 September 2011.

41. Wolfgang Ahrendt, Gordon J. Pace, and Gerardo Schneider. A Unified Approach for Static and Runtime Verification: Framework and Applications. In *5th International Symposium On Leveraging Applications of Formal Methods, Verification and Validation (ISoLA'12) - Part I*, volume 7609 of *LNCS*, pages 312–326, Heraclion, Crete, 15-18 October 2012. Springer.

42. Hallstein A. Hansen, Gerardo Schneider, and Martin Steffen. Reachability analysis of non-linear planar autonomous systems. In *Fourth International Conference on Fundamentals of Software Engineering (FSEN'11)*, volume 7141 of *LNCS*, pages 206–220, Teheran, Iran, 20-22 April 2012. Springer.

43. Gerardo Schneider. Towards a framework for analyzing normative texts in controlled natural language. In *6th International Workshop on Formal Languages and Analysis of Contract-Oriented Software (FLACOS'12)*, EPTCS, Bertinoro, Italy, 19 September 2012.

44. Antonio Cerone, Markus Roggenbach, Holger Schlingloff, Gerardo Schneider, and Siraj Shaikh. Teaching formal methods for software engineering - ten principles. In *Fun with Formal Methods Workshop*, July 2013.

45. Robert Nagy, Gerardo Schneider, and Aram Timofeitchik. Automatic testing of real-time graphics systems. In *19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS'13)*, volume 7795 of *LNCS*, pages 465–479, Rome, Italy, 2013. Springer.

46. Pavel Rabetski and Gerardo Schneider. Migration of an on-premise application to the cloud: Experience report. In *European Conference on Service-Oriented and Cloud Computing (ESOCC'13)*, volume 8135 of *LNCS*, pages 227–241, Malaga, Spain, 2013. Springer.

47. John J. Camilleri, Gabrielle Paganelli, and Gerardo Schneider. A cnl for contract-oriented diagrams. In *Fourth Workshop on Controlled Natural Language (CNL 2014)*, volume 8625 of *LNCS*, pages 135–146. Springer, 2014.

48. Raúl Pardo and Gerardo Schneider. A formal privacy policy framework for social networks. In *12th International Conference on Software Engineering and Formal Methods (SEFM'14)*, volume 8702 of *LNCS*, pages 378–392. Springer, 2014.

49. Wolfgang Ahrendt, Mauricio Chimento, Gordon Pace, and Gerardo Schneider. A specification language for static and runtime verification of data and control properties. In *Formal Methods (FM'15)*, volume 9109 of *LNCS*, pages 108–125, Oslo, Norway, June 24-26 2015. Springer.

50. Jesús Mauricio Chimento, Wolfgang Ahrendt, Gordon Pace, and Gerardo Schneider. STARVOORS: A Tool for Combined Static and Runtime Verification of Java. In *The 15th International Conference on Runtime Verification (RV'15)*, volume 9333 of *LNCS*, pages 297–305, Vienna, Austria, September 22-25 2015. Springer.

51. Hamid Ebadi, David Sands, and Gerardo Schneider. Differential Privacy: Now it's Getting Personal. In *Proceedings of the 42nd Annual ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL'15)*, pages 69–81, Mumbai, India, 12-18 January 2015. ACM.

52. Gordon J. Pace, Fernando Schapachnik, and Gerardo Schneider. Conditional Permissions in Contracts. In *The 28th International Conference on Legal Knowledge and Information Systems (JURIX'15)*, volume 279 of *Frontiers in Artificial Intelligence and Applications*, pages 61–70. IOS Press, 2015.

53. Wolfgang Ahrendt, Gordon Pace, and Gerardo Schneider. StaRVOOrS - Episode II, Strengthen and Distribute the Force. In *7th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation – ISoLA'16 (1); Track: Static and Runtime Verification: Competitors or Friends?*, volume 9952 of *LNCS*, pages 402–415. Springer, 10-14 October 2016.

54. Thibaud Antignac, Riccardo Scandariato, and Gerardo Schneider. A Privacy-Aware Conceptual Model for Handling Personal Data. In *7th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation – ISoLA'16 (1); Track: Privacy and Security Issues in Information Systems*, volume 9952 of *LNCS*, pages 942–957. Springer, 10-14 October 2016.

55. John J. Camilleri, Normunds Gruzitis, and Gerardo Schneider. Extracting Formal Models from Normative Texts. In *21st International Conference on Applications of Natural Language to Information Systems (NLDB'16)*, volume 9612 of *LNCS*, pages 403–408. Springer, 22-24 June 2016.

56. Gordon Pace, Raúl Pardo, and Gerardo Schneider. On the Runtime Enforcement of Evolving Privacy Policies in Online Social Networks. In *7th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation – ISoLA'16 (2); Track: Runtime Verification and Enforcement, the (industrial) application perspective*, volume 9953 of *LNCS*, pages 407–412. Springer, 10-14 October 2016.

57. Raúl Pardo, Christian Colombo, Gordon Pace, and Gerardo Schneider. An Automata-based Approach to Evolving Privacy Policies for Social Networks. In *The 16th International Conference on Runtime Verification (RV'16)*, volume 10012 of *LNCS*, pages 285–301. Springer, 2016.

58. Raúl Pardo, Ivana Kellyérová, César Sánchez, and Gerardo Schneider. Specification of Evolving Privacy Policies for Online Social Networks. In *23rd International Symposium on Temporal Representation and Reasoning (TIME'16)*, pages 70–79. IEEE CPS, 2016.

59. Gerardo Schneider. On the Specification and Enforcement of Privacy-Preserving Contractual Agreements. In *7th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation – ISoLA'16 (2); Track: Runtime Verification and Enforcement, the (industrial) application perspective*, volume 9953 of *LNCS*, pages 413–419. Springer, 10-14 October 2016.
60. Thibaud Antignac, Mukelabai Mukelabai, and Gerardo Schneider. Specification, Design, and Verification of an Accountability-aware Surveillance Protocol. In *Proceedings of the Symposium on Applied Computing –Software Verification and Testing track (SAC-SVT'17)*, pages 1372–1378. ACM, 2017.
61. Thibaud Antignac, David Sands, and Gerardo Schneider. Data Minimisation: A Language-Based Approach. In *IFIP Information Security & Privacy Conference (IFIP SEC'17)*, volume 502 of *IFIP Advances in Information and Communication Technology (AICT)*, pages 442–456, Rome, Italy, 2017. Springer Science and Business Media.
62. Pablo Picazo-Sánchez, Raúl Pardo, and Gerardo Schneider. Secure Photo Sharing in Social Networks. In *IFIP Information Security & Privacy Conference (IFIP SEC'17)*, volume 502 of *IFIP Advances in Information and Communication Technology (AICT)*, pages 79–92, Rome, Italy, 2017. Springer Science and Business Media.

Dissemination Articles

1. P. Giambiagi, O. Owe, A. P. Ravn, and G. Schneider. Contract-oriented software development for internet services. In *ERCIM News – Special: The Future WEB*, number 72, pages 47–48. January 2008.

Other Contributions

1. Gerardo Schneider and Laira V. Toscani. Fixed point theory in computer science. Anais do CNMAC, Curitiba, Brazil, August 1995. (Extended abstract, in Portuguese).
2. Gerardo Schneider and Rafael Accorsi. Introduction to linear logic. Primeiro Workshop sobre Métodos Formais e Qualidade de Software, Porto alegre, Brazil, July 1996. (In Portuguese).
3. Gerardo Schneider and Antônio C. da Rocha Costa. Sequential and parallel computation strategies on coherence spaces. CLEI'96, Bogotá, Colombia, June 1996.
4. Gerardo Schneider and Antônio C. da Rocha Costa. Coherence space as event structure and concrete data structure. XXIV SEMISH, Brasilia, Brazil, August 1997.
5. Pablo Giambiagi, Gerardo Schneider, and Frank D. Valencia. A note on scope and infinite behaviour in CCS-like calculi. NWPT'2003, Turku, Finland, October 29–31 2003. Extended Abstract.
6. Gerardo Schneider. Computing invariance kernels of polygonal hybrid systems. NWPT'2003, Turku, Finland, October 29–31 2003. Extended Abstract.
7. Gerardo Schneider. Memory usage estimation for java cards. NWPT'2004, Uppsala, Sweden, October 06–08 2004. Extended Abstract.
8. Gordon Pace and Gerardo Schneider. Improving polygonal hybrid systems reachability analysis through the use of the phase portrait. CSAW'06, Malta, 2006.
9. Cristian Prisacariu and Gerardo Schneider. Towards model checking contracts. NWPT'07/FLACOS'07 Workshop Proceedings, Oslo, Norway, October 9–10 2007. Extended Abstract.
10. Stephen Fenech, Gordon J. Pace, and Gerardo Schneider. Conflict Analysis of Deontic Contracts. NWPT'08, Tallinn, Estonia, November 19–21 2008. Extended Abstract.
11. Hallstein A. Hansen and Gerardo Schneider. On the reachability analysis of planar, non-linear autonomous systems using hybrid systems. NWPT'09, Lyngby, Denmark, October 2009. Extended Abstract.

Technical Reports

1. Gerardo Schneider. Using induction for algorithm design. Technical report, Dissertation for Engineering Degree. Facultad Regional Concepción del Uruguay - UTN, Concepción del Uruguay, Argentina, December 1992. (In Spanish).
2. Gerardo Schneider. An algebraic specification language. Technical report, CPGCC da UFRGS, Porto Alegre, Brazil, July 1994. (In Portuguese).
3. Gerardo Schneider. Fixed point theory in Computer Science. Technical report, CPGCC da UFRGS, Porto Alegre, Brazil, January 1995. (In Portuguese).
4. Pablo Giambiagi and Gerardo Schneider. A Verilog specification of STARI. Technical report, UNU/IIST, P.O.Box 3058, Macau, February 1998.
5. Gerardo Schneider and Xu Qiwen. Towards a Formal Semantics of Verilog using Duration Calculus. Technical Report 133, UNU/IIST, P.O.Box 3058, Macau, February 1998.
6. Gerardo Schneider and Xu Qiwen. Towards an Operational Semantics of Verilog. Technical Report 147, UNU/IIST, P.O.Box 3058, Macau, October 1998.

7. Eugene Asarin, Gerardo Schneider, and Sergio Yovine. On the decidability of the reachability problem for planar differential inclusions. Technical report, VERIMAG, Grenoble, France, January 2001.

8. Gerardo Schneider. Invariance kernels of polygonal differential inclusions. Technical Report 2003-042, Department of Information Technology, Uppsala University, August 2003.

9. Michael Baldamus, Richard Mayr, and Gerardo Schneider. A backward/forward strategy for verifying safety properties of infinite-state systems. Technical Report 2003-065, Department of Information Technology, Uppsala University, January 2004.

10. Pablo Giambiagi, Gerardo Schneider, and Frank D. Valencia. On the expressiveness of CCS-like calculi. Technical Report 2004-002, Department of Information Technology, Uppsala University, Sweden, January 2004.

11. Gerardo Schneider. A constraint-based algorithm for analysing memory usage on java cards. Technical Report RR-5440, INRIA, December 2004.

12. Gerardo Schneider. Towards computing phase portrait objects of polygonal hybrid systems on surfaces. Technical Report 331, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, March 2005.

13. Pablo Giambiagi, Olaf Owe, Anders P. Ravn, and Gerardo Schneider. Contract-based internet service software development: A proposal. Technical Report 333, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, January 2006.

14. Gordon Pace and Gerardo Schneider. Static analysis of SPDIs for state-space reduction. Technical Report 336, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, April 2006.

15. Einar B. Johnsen, Olaf Owe, and Gerardo Schneider. NWPT'07/FLACOS'07 Workshop Proceedings. Technical Report 366, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, October 2007. Editors.

16. Olaf Owe, Gerardo Schneider, and Martin Steffen. Components, objects, and contracts. Technical Report 363, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, August 2007.

17. Olaf Owe, Gerardo Schneider, and Arild Torjusen. Towards integration of XML in the Creol object-oriented language. Technical Report 365, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, October 2007.

18. Gordon Pace, Cristian Prisacariu, and Gerardo Schneider. Model checking contracts –a case study. Technical Report 362, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, August 2007.

19. Cristian Prisacariu and Gerardo Schneider. An Algebraic Structure for the Action-Based Contract Language CL - theoretical results. Technical Report 361, Department of Informatics, University of Oslo, Oslo, Norway, July 2007. Updated March 2008.

20. Cristian Prisacariu and Gerardo Schneider. Towards a formal definition of electronic contracts. Technical Report 348, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, January 2007.

21. Gerardo Schneider. On the decidability of the reachability problem for GSPDIs. Technical Report 359, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, June 2007.

22. Gordon Pace and Gerardo Schneider. Relaxing Goodness is Still Good for SPDIs. Technical Report 372, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, January 2008.

23. Gordon J. Pace and Gerardo Schneider. FLACOS'08 Workshop Proceedings. Technical Report 377, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, October 2008. Editors.

24. Cristian Prisacariu and Gerardo Schneider. CL: A Logic for Reasoning about Legal Contracts —Semantics. Technical Report 371, Oslo, Norway, February 2008.

25. Christian Colombo, Gordon Pace, and Gerardo Schneider. Resource-bounded runtime verification of java programs with real-time properties. Technical Report CS2009-01, Department of Computer Science, University of Malta, December 2009.

26. Gordon J. Pace and Gerardo Schneider. FLACOS'09 Workshop Proceedings. Technical Report 385, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, September 2009. Editors.

27. Hallstein Hansen, Gerardo Schneider, and Martin Steffen. Reachability analysis of complex planar hybrid systems. Technical Report 412, Department of Informatics, University of Oslo, PO Box 1080 Blindern, N-0316 Oslo, Norway, November 2011.

Dissertations and Thesis

1. Gerardo Schneider. Sequential and parallel computation strategies on coherence spaces. Master's thesis, CPGCC – UFRGS, Porto Alegre, Brazil, March 1996. (In Portuguese).

2. Gerardo Schneider. *Algorithmic Analysis of Polygonal Hybrid Systems.* PhD thesis, VERIMAG – UJF, Grenoble, France, July 2002.

Tools

I have participated in the implementation of the following tools:

- **SPeeDI:** Together with Gordon Pace, I have implemented a verification tool for Polygonal Differential Inclusions (SPDI).
- **SPeeDI⁺:** Together with Gordon Pace, I have extended the tool SPeeDI for computing phase portrait objects of SPDIs. `http://www.cs.um.edu.mt/speedi/`

Besides, I have contributed to the conceptual definition and underlying theoretical results for the following tools:

- **AnaCon:** A framework for analysis normative texts written in controlled natural language. `http://www.cse.chalmers.se/~gersch/anacon/`.
- **CLAN:** A tool for automatic detection of conflicts in deontic contracts. Main developer: Stephen Fenech. `http://www.cs.um.edu.mt/svrg/Tools/CLTool`
- **GSPeeDI:** A verification tool for Generalized Polygonal Hybrid Systems (GSPDI). Main developer: Hallstein A. Hansen.
- **LARVA:** A runtime verification platform for runtime verification of critical (real-time) systems. Main developer: Christian Colombo. `http://www.cs.um.edu.mt/svrg/Tools/LARVA/`