

## LISTA LUCRARI ALIN STEFANESCU

### Journal Papers

1. T. Stoenescu, A. Stefanescu, S. Predut, F. Ipate. Binary Analysis based on Symbolic Execution and Reversible x86 Instructions, *Fundamenta Informaticae* 153 (1-2), pp. 105-124, 2017.
2. L. Lin, A. Stefanescu, R. Su. On Distributed and Parameterized Supervisor Synthesis Problems. *IEEE Transactions on Automatic Control* 61(3), pp. 777-782, 2016.
3. F. Ipate, A. Stefanescu, I. Dinca. Model Learning and Test Generation using Cover Automata. *Computer Journal* 58(5), pp. 1140-1159, Oxford University Press, 2015.
4. I. M. Niculescu, M. Gheorghe, F. Ipate, A. Stefanescu. From Kernel P Systems to X-Machines and FLAME. *Journal of Automata, Languages and Combinatorics* 19(1-4), pp. 239-250, 2014.
5. A. Stefanescu, S. Wieczorek, M. Schur. Message Choreography Modeling - A Domain-Specific Language for Consistent Enterprise Service Integration. *Software and Systems Modeling (SoSyM)* 13(1), pp. 9-33, Springer, 2014.
6. P. Mohagheghi, W. Gilani, A. Stefanescu, M.A. Fernandez. An Empirical Study of the State of the Practice and Acceptance of Model-Driven Engineering in four industrial cases. *Empirical Software Engineering (EMSE)* 18(1), pp. 89-116, 2013.
7. P. Mohagheghi, W. Gilani, A. Stefanescu, M.A. Fernandez, B. Nordmoen, M. Fritzsche. Where does Model-Driven Engineering Help? Experiences from Three Industrial Cases. *Software and Systems Modeling (SoSyM)* 12(3), pp. 619-639, 2013.
8. Y. Chen, X.C. Ding, A. Stefanescu, C. Belta. A Formal Approach to the Deployment of Distributed Robotic Teams. *IEEE Transactions on Robotics* 28(1), pp. 158-171, 2012.

### Book Chapters

1. A. Turcanu, L. Mierla, F. Ipate, A. Stefanescu, H. Bai, M. Holcombe, S. Coakley. Modelling and analysis of E. coli respiratory chain. Chapter in "Applications of Membrane Computing in Systems and Synthetic Biology" book. P. Frisco, M. Gheorghe, M. J. Pérez-Jiménez (Eds), Emergence, Complexity and Computation series, vol. 7, pp. 247-266, Springer, 2014.
2. S. Wieczorek, V. Kozyura, W. Wei, A. Roth, A. Stefanescu. Business Information Sector. Chapter in "Industrial deployment of system engineering methods" book. A. Romanovsky, M. Thomas (Eds), pp. 63-79. Springer, 2013.

### Papers in Conferences and Workshops with Springer/IEEE/ACM proceedings

1. C. Paduraru, M. Melemciuc, A. Stefanescu. A distributed implementation using Apache Spark of a genetic algorithm applied to test data generation. To appear in Proc. of PDEIM'17, workshop of GECCO'17, ACM 2017.
2. T. Stoenescu, A. Stefanescu, S. Predut, F. Ipate. RIVER: A Binary Analysis Framework using Symbolic Execution and Reversible x86 Instructions. In Proc. of 21st International Symposium on Formal Methods (FM'16), LNCS 9995, pp. 779-785, Springer, 2016.
3. G. Ciobanu, T.S. Hoang, A. Stefanescu. From TiMo to Event-B: event-driven timed mobility. In Proc. of 19th IEEE Int. Conf. on Engineering of Complex Computer Systems (ICECCS'14), pp. 1-10, IEEE Computer Society, 2014. (the paper got a best paper award)

4. L. Lin, A. Stefanescu, R. Su, W. Wang, A. R. Shehabinia. Towards Decentralized Synthesis: Decomposable Sublanguage and Joint Observability Problems. In *Proc. of 55th American Control Conference (ACC'14)*, pp. 2047-2052. IEEE, 2014.
5. S. Akshay, I. Dinca, B. Genest, A. Stefanescu. Implementing Realistic Asynchronous Automata. In *Proc. of 33rd Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS'13)*, LIPIcs series, volume 24, pp. 213-224. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2013.
6. L. Lin, R. Su, A. Stefanescu. Remarks on the Difficulty of Top-Down Supervisor Synthesis. In *Proc. of 12th International Conference on Control, Automation, Robotics, and Vision (ICARCV'12)*, pp. 270-275. IEEE Computer Society, 2012.
7. I. Dinca, F. Ipate, A. Stefanescu. Model Learning and Test Generation for Event-B decomposition. In *Proc. of ISoLA'12 conference*, LNCS, volume 7609, pp. 539-553. Springer, 2012.
8. I. Dinca, F. Ipate, L. Mierla, A. Stefanescu. Learn and Test for Event-B - a Rodin Plugin. In *Proc. of ABZ'12*, LNCS, volume 7316, pp. 361-364. Springer, 2012.
9. A. Stefanescu, F. Ipate, R. Lefticaru, C. Tudose. Towards Search-Based Testing for Event-B Models. In *Proc. of 4th International Workshop on Search-Based Software Testing (SBST'11) from ICSTW'11*, pp. 194-197. IEEE Computer Society, 2011.
10. I. Dinca, A. Stefanescu, F. Ipate, R. Lefticaru, C. Tudose. Test Data Generation for Event-B Models using Genetic Algorithms. In *Proc. of 2nd International Conference on Software Engineering and Computer Systems (ICSECS'11)*. CCIS Series, volume 181, pp. 76-90. Springer, 2011.
11. Y. Chen, X.C. Ding, A. Stefanescu, C. Belta. A Formal Approach to Deployment of Robotic Teams in an Urban-Like Environment. In *Proc. of 10th International Symposium on Distributed Autonomous Robotics System (DARS'10)*. Springer Tracts in Robotics, volume 83, pp. 313-327. Springer, 2013. (The paper got a best student paper award)
12. A. Stefanescu, M.F. Wendland, S. Wiczorek. Using the UML testing profile for enterprise service choreographies. 8 pp. In *Proc. of 36th EUROMICRO Conference on Software Engineering and Advanced Applications (SEAA'10)*, pp. 12-19. IEEE Computer Society, 2010.
13. Y. Chen, S. Birch, A. Stefanescu, C. Belta. A Hierarchical Approach to Automatic Deployment of Robotic Teams with Communication Constraints. In *Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2010)*, pp. 5079-5084. IEEE Computer Society, 2010.
14. S. Wiczorek, A. Stefanescu, A. Roth. Model-driven Service Integration Testing - A Case Study. In *Proc. of International Conference on the Quality of Information and Communications Technology (QUATIC'10)*, pp. 292-297. IEEE Computer Society, 2010.
15. S. Wiczorek, A. Stefanescu. Improving testing of enterprise systems by model-based testing on graphical user interfaces. In *Proc. of the 7th Workshop on System Testing and Validation (STV'10)*, pp. 352-357, IEEE CS, 2010.
16. S. Wiczorek, A. Roth, A. Stefanescu, V. Kozyura, A. Charfi, F.M. Kraft, I. Schieferdecker. Viewpoints for modeling choreographies in service-oriented architectures. In *Proc. of the 3rd European Conference on Software Architecture (ECSA'09)*, pp. 11-20, IEEE Computer Society, 2009.
17. S. Wiczorek, A. Stefanescu, I. Schieferdecker. Model-based integration testing of enterprise services. In *Proc. of Testing: Academic and Industrial Conference (TAICPART'09)*, pp. 56-60. IEEE Computer Society, 2009.
18. A. Stefanescu, S. Wiczorek, A. Kirshin. MBT4Chor: a model-based testing approach for service choreographies. In *Proc. of 5th European Conference on Model-Driven Architecture Foundations and Applications (ECMDA'09)*, LNCS, volume 5562, pp. 313-324. Springer, 2009.
19. S. Wiczorek, A. Stefanescu. Service integration: A soft spot in the SOA testing stack. In *Proc. of 5th Central and Eastern European Software Engineering Conference in Russia (CEE-SECR'09)*, pp. 211-216, IEEE Computer Society, 2009.

20. S. Wiczorek, A. Roth, A. Stefanescu, A. Charfi. Precise steps for choreography modeling for SOA validation and verification. In *Proc. of International Symposium on Service-Oriented System Engineering (SOSE'08)*, pp.148-153. IEEE CS, 2008.
21. S. Wiczorek, A. Stefanescu, M. Fritzsche, J. Schnitter. Enhancing test driven development with model based testing and performance analysis. In *Proc of Testing: Academic and Industrial Conference (TAICPART'08)*, pp. 82-86. IEEE Computer Society, 2008.
22. S. Wiczorek, A. Stefanescu, I. Schieferdecker. Test data provision for ERP systems. In *Proc. of the International Conference on Software Testing, Verification, and Validation (ICST'08)*, pp. 396-403. IEEE Computer Society, 2008.
23. S. Leue, A. Stefanescu, W. Wei. An AsmL semantics for dynamic structures and run time schedulability in UML-RT. In *Proc. of the 46th International Conference on Objects, Models, Components, Patterns (TOOLS'08)*, Lecture Notes in Business Information Processing (LNBIP), volume 11, pp. 238-257. Springer, 2008.
24. S. Leue, A. Stefanescu, W. Wei. Dependency Analysis for Control Flow Cycles in Reactive Communicating Processes. In 15th International SPIN Workshop on Model Checking of Software (SPIN'08), LNCS, volume 5156, pp. 176-195. Springer, 2008.
25. S. Leue, A. Stefanescu, W. Wei. A livelock freedom analysis for infinite state asynchronous reactive systems. In *Proc. of the Int. Conf. of Concurrency Theory (CONCUR'06)*, LNCS, volume 4137, pp. 79-94. Springer, 2006.
26. A. Stefanescu, K. Heljanko. Complexity results for checking distributed implementability. In *Proc. of the 5th International Conference on Application of Concurrency to System Design (ACSD'05)*, pp. 78-87. IEEE CS, 2005.
27. A. Stefanescu, J. Esparza, A. Muscholl. Synthesis of distributed algorithms using asynchronous automata. In *Proc. of International Conference of Concurrency Theory (CONCUR'03)*, LNCS, volume 2761, pp. 27-41. Springer, 2003.
28. A. Stefanescu. Automatic synthesis of distributed systems. In *Proc. of 17th IEEE International Conference on Automated Software Engineering (ASE'02)*, p. 315. IEEE Computer Society, 2002.

### **Other Papers (Workshops, Technical Reports, Whitepapers)**

1. I. Dinca, F. Ipate, A. Stefanescu. A survey of scientific results of the team of the University of Pitesti in the DEPLOY project. *Buletin Stiintific al Universitatii din Pitesti, seria Matematica-Informatica*, no. 18, pp. 13-20, December 2012.
2. A. Roth, A. Stefanescu, S. Wiczorek. Automatic test design and verification using MCM. *Research Whitepaper*, 8 pages. SAP Research, May 2009.
3. S. Wiczorek, A. Stefanescu, J. Großmann. Enabling Model-Based Testing for SOA Integration. In *Proc. of Model-based Testing in Practice Workshop (MOTIP'08)*, in conjunction with ECMDA'08 conference, pp. 77-82. Fraunhofer IRB Verlag, 2008.
4. S. Leue, A. Stefanescu, W. Wei. An AsmL Semantics for Dynamic Structures and Run Time Schedulability in UML-RT. *Technical Report soft-08-02*, 37 pages, Chair for Software Engineering. University of Konstanz, 2008.
5. A. Stefanescu. Next-generation model-based testing for service-oriented architectures at SAP. *Research Whitepaper*, 17 pages. SAP Research, 2008.
6. S. Wiczorek, A. Stefanescu. Challenges for ERP test data generation. In *Proc. of 5th Workshop on System Testing and Validation (STV'07)*, in conjunction with ICSSEA conference. Fraunhofer IRB Verlag, 2007.
7. A. Stefanescu, S. Wiczorek. An Analysis of the Testing Process at AP SRM. *Technical Report*, 11 pages. SAP Research, 2007.
8. S. Leue, A. Stefanescu, W. Wei. A livelock freedom analysis for infinite state asynchronous reactive systems, *Technical Report soft-06-02*, 16 pages, Chair for Software Engineering. University of Konstanz, 2006.
9. A. Stefanescu, K. Heljanko. Complexity results for checking distributed implementability. *Technical Report 05/2004*, 37 pages. University of Stuttgart, 2004.