

Lijun Zhang - DTU Orbit (12/08/2016)

Zhang, Lijun
lizh@dtu.dk

Department of Applied Mathematics and Computer Science - Associate Professor, Former

Publications:

A tighter bound for the self-stabilization time in Herman's algorithm

Feng, Y. & Zhang, L. 2013 In : *Information Processing Letters*. 113, 13, p. 486-488
Publication: Research - peer-review › Journal article – Annual report year: 2013

Bisimulations meet PCTL equivalences for probabilistic automata

Song, L., Zhang, L., Godskesen, J. C. & Nielson, F. 2013 In : *Logical Methods in Computer Science*. 9, 2, 34 p., 7
Publication: Research - peer-review › Journal article – Annual report year: 2013

Deciding bisimilarities on distributions

Eisentraut, C., Hermanns, H., Krämer, J., Turrini, A. & Zhang, L. 2013 *Quantitative Evaluation of Systems: 10th International Conference, QEST 2013, Buenos Aires, Argentina, August 27-30, 2013. Proceedings*. Springer, p. 72-88 (Lecture Notes in Computer Science, Vol. 8054).
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Model checking conditional CSL for continuous-time Markov chains

Gao, Y., Xu, M., Zhan, N. & Zhang, L. 2013 In : *Information Processing Letters*. 113, 1-2, p. 44-50
Publication: Research - peer-review › Journal article – Annual report year: 2013

On the relationship between LTL normal forms and Büchi automata

Li, J., Pu, G., Zhang, L., Wang, Z., He, J. & Guldstrand Larsen, K. 2013 *Theories of Programming and Formal Methods: Essays Dedicated to Jifeng He on the Occasion of His 70th Birthday*. Springer, p. 256-270 (Lecture Notes in Computer Science, Vol. 8051).
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Revisiting Weak Simulation for Substochastic Markov Chains

Jansen, D. N., Song, L. & Zhang, L. 2013 *Quantitative Evaluation of Systems: 10th International Conference, QEST 2013, Buenos Aires, Argentina, August 27-30, 2013. Proceedings*. Springer, p. 209-224 (Lecture Notes in Computer Science, Vol. 8054).
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

The Quest for Minimal Quotients for Probabilistic Automata

Eisentraut, C., Hermanns, H., Schuster, J., Turrini, A. & Zhang, L. 2013 *Tools and Algorithms for the Construction and Analysis of Systems: 19th International Conference, TACAS 2013, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2013, Rome, Italy, March 16-24, 2013. Proceedings*. Springer, p. 16-31 (Lecture Notes in Computer Science, Vol. 7795).
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A General Framework for Probabilistic Characterizing Formulae

Sack, J. & Zhang, L. 2012 In : *Lecture Notes in Computer Science*. 7148, p. 396-411
Publication: Research - peer-review › Conference article – Annual report year: 2012

Belief Bisimulation for Hidden Markov Models Logical Characterisation and Decision Algorithm

Jansen, D. N., Nielson, F. & Zhang, L. 2012 *NASA Formal Methods: 4th International Symposium, NFM 2012, Norfolk, VA, USA, April 3-5, 2012. Proceedings*. Springer, p. 326-340 (Lecture Notes in Computer Science, Vol. 7226).
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Efficient CSL Model Checking Using Stratification

Zhang, L., Jansen, D. N., Nielson, F. & Hermanns, H. 2012 In : *Logical Methods in Computer Science*. 8, 2, p. Paper 17 18 p.

Publication: Research - peer-review › Journal article – Annual report year: 2012

Safety Verification for Probabilistic Hybrid Systems

Zhang, L., She, Z., Ratschan, S., Hermanns, H. & Hahn, E. M. 2012 In : *European Journal of Control*. 18, 6, p. 572-587

Publication: Research - peer-review › Journal article – Annual report year: 2013

Automata-Based CSL Model Checking

Zhang, L., Jansen, D. N., Nielson, F. & Hermanns, H. 2011 *Automata, Languages and Programming: 38th International Colloquium, ICALP 2011 - Zurich, Switzerland, July 4-8, 2011 - Proceedings, Part II*. Springer, p. 271-282 (Lecture Notes in Computer Science; No. 6756).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Bisimulations Meet PCTL Equivalences for Probabilistic Automata

Song, L., Zhang, L. & Godskesen, J. C. 2011 *CONCUR 2011 – Concurrency Theory: 22nd International Conference, CONCUR 2011 Aachen, Germany, September 6-9, 2011 Proceedings*. Springer, Vol. 6901, p. 108-123 (Lecture Notes in Computer Science; No. 6901).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Efficient Approximation of Optimal Control for Markov Games

Fearnley, J., Rabe, M., Schewe, S. & Zhang, L. 2011 *Proceedings of the IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science*.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

From Concurrency Models to Numbers: Performance and Dependability

Hermanns, H. & Zhang, L. 2011 *NATO Science for Peace and Security Series: D: Information and Communication Security*. IOS Press, Vol. 30, p. 182-210

Publication: Research › Book chapter – Annual report year: 2011

Game-based Abstraction and Controller Synthesis for Probabilistic Hybrid Systems

Hahn, E. M., Norman, G., Parker, D., Wachter, B. & Zhang, L. 2011 *2011 Eighth International Conference on Quantitative Evaluation of Systems (QEST)*.

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Measurability and Safety Verification for Stochastic Hybrid Systems

Fränzle, M., Hahn, E. M., Hermanns, H., Wolovick, N. & Zhang, L. 2011 *Proceedings of the 14th international conference on Hybrid systems: computation and control*. Association for Computing Machinery, p. 43-52

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Model Checking Algorithms for CTMDPs

Buchholz, P., Hahn, E. M., Hermanns, H. & Zhang, L. 2011 *Computer Aided Verification: 23rd International Conference, CAV 2011 - Snowbird, UT, USA, July 14-20, 2011 - Proceedings*. Springer, p. 225-242 (Lecture Notes in Computer Science; No. 6806).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

On Stabilization in Herman's Algorithm

Kiefer, S., Murawski, A. S., Ouaknine, J., Worrell, J. & Zhang, L. 2011 *Automata, Languages and Programming: 38th International Colloquium, ICALP 2011 - Zurich, Switzerland, July 4-8, 2011 - Proceedings, Part II*. Springer, p. 466-477 (Lecture Notes in Computer Science; No. 6756).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Probabilistic Logical Characterization

Hermanns, H., Parma, A., Segala, R., Wachter, B. & Zhang, L. 2011 In : *Information and Computation*. 209, 2, p. 154-172

Publication: Research - peer-review › Journal article – Annual report year: 2011

Probabilistic Reachability for Parametric Markov Models

Hahn, E. M., Hermanns, H. & Zhang, L. 2011 In : *International Journal on Software Tools for Technology Transfer*. 13, 1, p. 3-19

Publication: Research - peer-review › Journal article – Annual report year: 2011

Synthesis for PCTL in Parametric Markov Decision Processes

Hahn, E. M., Han, T. & Zhang, L. 2011 *NASA Formal Methods: Third International Symposium, NFM 2011 - Pasadena, CA, USA, April 18-20, 2011 - Proceedings*. Springer, p. 146-161 (Lecture Notes in Computer Science; No. 6617).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Concurrency and Composition in a Stochastic World

Eisentraut, C., Hermanns, H. & Zhang, L. 2010 In : *Lecture Notes in Computer Science*.

Publication: Research - peer-review › Conference article – Annual report year: 2010

On Probabilistic Automata in Continuous Time

Eisentraut, C., Hermanns, H. & Zhang, L. 2010 In : *Symposium on Logic in Computer Science*. p. 342 - 351

Publication: Research - peer-review › Conference article – Annual report year: 2010

PARAM: A Model Checker for Parametric Markov Models

Hahn, E. M., Hermanns, H., Wachter, B. & Zhang, L. 2010 In : *Lecture Notes in Computer Science*.

Publication: Research - peer-review › Conference article – Annual report year: 2010

Safety Verification for Probabilistic Hybrid Systems

Zhang, L., She, Z., Ratschan, S., Hermanns, H. & Hahn, E. M. 2010 *Computer Aided Verification, Proceedings*. p. 196-211 (Lecture Notes in Computer Science, Vol. 6174).

Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Time-Bounded Reachability in Distributed Input/Output Interactive Probabilistic Chains

Carlin, G., Crouzen, P., D'Agénio, P., Hahn, E. M. & Zhang, L. 2010 In : *Lecture Notes in Computer Science*.

Publication: Research - peer-review › Conference article – Annual report year: 2010

Time-Bounded Reachability Probabilities in Continuous-Time Markov Decision Processes

Neuhäuser, M. R. & Zhang, L. 2010 In : *Sixth International Conference on the Quantitative Evaluation of Systems*.

Publication: Research - peer-review › Conference article – Annual report year: 2010

Projects:

Logics and models for stochastic analysis of information systems

Zeng, K., Nielsen, B. F., Nielson, F., Zhang, L., Buchholz, P. & Hillston, J.

01/11/2009 → 07/03/2013

Project: PhD