Lista publicațiilor științifice

(i) 10 lucrări selectate:

1) I. Drămnesc and T. Jebelean, *Synthesis of Sorting Algorithms using Multisets in Theorema*, Journal of Logical and Algebraic Methods in Programming, Elsevier, vol. 119, 100635 (2021), https://doi.org/10.1016/j.jlamp.2020.100635

2) I. Drămnesc, T. Jebelean, S. Stratulat, *Mechanical Syntheis of Sorting Algorithms for Binary Trees by Logic and Combinatorial Techniques*, Journal of Symbolic Computation, Elsevier, vol. 90, 2019, pp. 3 – 41, https://doi.org/10.1016/j.jsc.2018.04.002

3) I. Drămnesc and T. Jebelean, *Synthesis of List Algorithms by Mechanical Proving*, Journal of Symbolic Computation, Elsevier, vol. 69, issue 1, 2015, pp. 61 – 92, http://dx.doi.org/10.1016/j.jsc.2014.09.030

4) I. Drămnesc, T. Jebelean, *AlCons: Deductive Synthesis of Sorting Algorithms in Theorema* In: Proceedings of ICTAC 2021: 18th International Colloquium on Theoretical Aspects of Computing, pp. 314-333, September 2021, Nur-Sultan, Kazakhstan, https://doi.org/10.1007/978-3-030-85315-0_18

5) I. Drămnesc, E. Abraham, T. Jebelean, G. Kusper, S. Stratulat, *Experiments with Automated Reasoning in the Class* In: Proceedings of CICM 2022: 15th International Conference on Intelligent Computer Mathematics, pp. 287-304, September 2022, Tbilisi, Georgia, LNCS, Springer, https://doi.org/ 10.1007/978-3-031-16681-5_20

6) I. Drămnesc, T. Jebelean, *Automatic Synthesis of Merging and Inserting Algorithms on Binary Trees Using Multisets in Theorema* In: Proceedings of MACIS 2019: 8rd International Conference on Mathematical Aspects of Computer and Information Sciences, pp. 153-168, November 13-15, 2019, Gebze-Istanbul, Turkey, LNCS, Springer, https://doi.org/10.1007/978-3-030-43120-4_13

7) I. Drămnesc, T. Jebelean, S. Stratulat, *Proof-based Synthesis of Sorting Algorithms for Trees*, In: Proceedings of LATA 2016: 10th International Conference on Language and Automata Theory and Applications, pp. 562-575, March 14-18, 2016, Prague, Czech Republic, Springer, http://dx.doi.org/10.1007/978-3-319-30000-9_43

8) I. Drămnesc, T. Jebelean, *Case Studies on Algorithm Discovery from Proofs: The Delete Function on Lists and Binary Trees using Multisets*, In: Proceedings of SISY 2019: the 17th IEEE International Symposium on Intelligent Systems and Informatics, pp. 213-220, September 12-14, 2019, IEEE Xplore, http://dx.doi.org/10.1109/SISY47553.2019.9111483

9) I. Drămnesc, T. Jebelean, S. Stratulat, *A case study on algorithm discovery from proofs: The insert function on binary trees*, In: Proceedings of SACI 2016: 11th IEEE International Symposium on Applied Computational Intelligence and Informatics, pp. 231-236, May 12-14, 2016, Timisoara, Romania, http://dx.doi.org/10.1109/SACI.2016.7507376

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(ii) Teza de doctorat:

I. Drămnesc, *Case Studies on Algorithm Synthesis and Theory Exploration in Theorema*, Faculty of Mathematics and Computer Science, West University of Timisoara, December 2012, Coordonator științific Scientific: Prof. Dr. Tudor Jebelean, Johannes Kepler University of Linz, Austria.

(iii) Cărți:

1) M. Marin, V. Negru, I. Drămnesc, *Principles and Practice of Functional Programming*, (in EN), Editura Universității de Vest, Timisoara, 2016, ISBN 978-973-125-451-7, https://editura.uvt.ro/?p=1702

2) I. Drămnesc et. al, *Computational Logic: A Practical Approach*, (in EN), Editura Universității de Vest, Timisoara 2022, ISBN 978-973-125-964-2

(iv) Articole publicate în reviste din fluxul științific internațional:

1) I. Drămnesc, E. Abraham, T. Jebelean, G. Kusper, S. Stratulat, *Automated Reasoning in the Class*, Journal of Computer Algebra Rundbrief, Nr. 71, pp. 21-26, Oktober 2022 https://fachgruppe-computeralgebra.de/data/CA-Rundbrief/car71.pdf#page=21

2) I. Drămnesc and T. Jebelean, *Synthesis of Sorting Algorithms using Multisets in Theorema*, Journal of Logical and Algebraic Methods in Programming, Elsevier, vol. 119, 100635 (2021), https://doi.org/10.1016/j.jlamp.2020.100635

3) I. Drămnesc, T. Jebelean, S. Stratulat, *Mechanical Syntheis of Sorting Algorithms for Binary Trees by Logic and Combinatorial Techniques*, Journal of Symbolic Computation, Elsevier, vol. 90, 2019, pp. 3 – 41, https://doi.org/10.1016/j.jsc.2018.04.002

4) I. Drămnesc and T. Jebelean, *Synthesis of List Algorithms by Mechanical Proving*, Journal of Symbolic Computation, Elsevier, vol. 69, issue 1, 2015, pp. 61 – 92, http://dx.doi.org/10.1016/j.jsc.2014.09.030

5) I. Drămnesc and T. Jebelean, *Proof Based Synthesis of Algorithms: A Case Study on Monotone Lists*, Scientific Bulletin of The „Politehnica"' University of Timişoara, Romania, Transactions on Automatic Control and Computer Science, vol. 60(74), issue 2, 2015, pp. 97 – 104, ISSN 1224-600X, http://www.ac.upt.ro/journal/article.php?v=60(74)%20&%20vn=2%20&%20n=4

6) I. Drămnesc and T. Jebelean, *Systematic Exploration of List Theory in Theorema*, Scientific Bulletin of The „Politehnica"' University of Timişoara, Romania, Transactions on Automatic Control and Computer Science, vol. 57(71), issue 4, 2012, pp. 203 – 210, ISSN 1224-600X, http://www.ac.upt.ro/journal/article.php?v=57(71)%20&%20vn=4%20&%20n=1

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(v) Articole publicate în proceedings-urile conferințelor internaționale

1) I. Drămnesc, E. Abraham, T. Jebelean, G. Kusper, S. Stratulat, *Experiments with Automated Reasoning in the Class* In: Proceedings of CICM 2022: 15th International Conference on Intelligent Computer Mathematics, pp. 287-304, September 2022, Tbilisi, Georgia, LNCS, Springer, https://doi.org/ 10.1007/978-3-031-16681-5_20

2) I. Drămnesc, E. Abraham, T. Jebelean, G. Kusper, S. Stratulat, *ARC: An Educational Project on Automated Reasoning in the Class* In Proceedings of EdMedia+ Innovate Learning 2022, pp. 934-043, June 2022, New York City, NY, United States of America, AACE, https://www.learntechlib.org/primary/p/221395

3) I. Drămnesc, T. Jebelean, *Automated Reasoning in the Class: An Educational Project for Software Engineers* In: Proceedings of INTED2022: 16th International Technology, Education and Development Conference, pp. 6224-6228, March 2022, Valencia, Spain, https://doi.org/10.21125/inted.2022.1581

4) I. Drămnesc, T. Jebelean, *AICons: Deductive Synthesis of Sorting Algorithms in Theorema* In: Proceedings of ICTAC 2021: 18th International Colloquium on Theoretical Aspects of Computing, pp. 314-333, September 2021, Nur-Sultan, Kazakhstan, https://doi.org/10.1007/978-3-030-85315-0_18

5) I. Drămnesc, T. Jebelean, *Synthesis of Merging Algorithms on Binary Trees using Multisets in Theorema* In: Proceedings of SACI 2021: 15th IEEE International Symposium on Applied Computational Intelligence and Informatics, pp. 497-502, May 2021, Timisoara, Romania, https://doi.org/10.1109/SACI51354.2021.9465619

6) I. Drămnesc, T. Jebelean, *Deductive Synthesis of Min-Max-Sort Using Multisets in Theorema* In: Proceedings of SACI 2020: 14th IEEE International Symposium on Applied Computational Intelligence and Informatics, pp. 165-172, May 2020, Timisoara, Romania, https://doi.org/10.1109/SACI49304.2020.9118814

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12) I. Drămnesc, T. Jebelean, S. Stratulat, *Proof-based Synthesis of Sorting Algorithms for Trees*, In: Proceedings of LATA 2016: 10th International Conference on Language and Automata Theory and Applications, pp. 562-575, March 14-18, 2016, Prague, Czech Republic, Springer, http://dx.doi.org/10.1007/978-3-319-30000-9_43

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14) I. Drămnesc, T. Jebelean, S. Stratulat, *Theory Exploration of Binary Trees*, In: Proceedings of SISY 2015: the 13th IEEE International Symposium on Intelligent Systems and Informatics, pp. 139-144, 17-19 September 2015, IEEE Xplore, http://dx.doi.org/10.1109/SISY.2015.7325367

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18) I. Drămnesc, T. Jebelean, *Discovery of Inductive Algorithms through Automated Reasoning: A Case Study on Sorting*, In: Proceedings of SISY 2012: the IEEE 10th Jubilee International Symposium on Intelligent Systems and Informatics, pp. 293-298, 20-22 September 2012, IEEE Xplore, http://dx.doi.org/10.1109/SISY.2012.6339532

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21) I. Drămnesc, T. Jebelean, A. Crăciun, *A Case Study in Systematic Exploration of Tuple Theory*, Proceedings of SCSS 2010: Symbolic Computation in Software Science (Hagenberg, Austria), RISC Report Series, No 10-10, pp. 82-95, University of Linz, Austria, 29-30 July 2010, http://www.risc.jku.at/publications/download/risc_4191/Proceedings-SCSS-2010.pdf.

(vi) Publicații: Rapoarte tehnice internaționale

1) I. Drămnesc, T. Jebelean, *Synthesis of Delete on Lists and Binary Trees Using Multisets in Theorema*, Technical report no. 20-15 in RISC Report Series, Research Institute for Symbolic Computation, University of Linz, Schloss Hagenberg, 4232 Hagenberg, Austria, September 2020 http://www3.risc.jku.at/publications/download/risc_6206/20-15.pdf

2) I. Drămnesc, T. Jebelean, *Implementation of Deletion Algorithms on Lists and Binary Trees in Theorema*, Technical report no. 20-04 in RISC Report Series, Research Institute for Symbolic Computation, University of Linz, Schloss Hagenberg, 4232 Hagenberg, Austria, April 2020 http://www3.risc.jku.at/publications/download/risc_6094/DeletionAlgorithms-Tma-report.pdf

3) I. Drămnesc, T. Jebelean, S. Stratulat, *Synthesis of Some Algorithms for Trees: Experiments in Theorema*, Technical report no. 15-04 in RISC Report Series, Research Institute for Symbolic Computation, University of Linz, Schloss Hagenberg, 4232 Hagenberg, Austria, 2015 http://www3.risc.jku.at/publications/download/risc_5147/ISA-TR6-2015.pdf

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5) I. Drămnesc, T. Jebelean, *Semi-automatic Synthesis of Some Sorting Programs in Theorema*, Technical report no. 12-01 in RISC Report Series, Research Institute for Symbolic Computation (RISC), University of Linz, Schloss Hagenberg, 4232 Hagenberg, Austria, January 2012 https://www3.risc.jku.at/publications/download/risc_4410/12-01-ISA-TR4-2012.pdf

6) I. Drămnesc, T. Jebelean, *Automated Reasoning on Tuples - Case Studies in Proof Based Synthesis*, Technical report no. 11-08 in RISC Report Series, Research Institute for Symbolic Computation (RISC), University of Linz, Schloss Hagenberg, 4232 Hagenberg, Austria, July 2011 https://www3.risc.jku.at/publications/download/risc_4365/ISA-TR3-2011.pdf

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