

Publication list of Gergely Varró

January 24, 2016

Proceedings

- [P1] Andy Schürr, Dániel Varró, and Gergely Varró, editors. *Proc. of the 4th International Symposium on Applications of Graph Transformations with Industrial Relevance*, volume 7233 of *Lecture Notes in Computer Science*, Budapest, Hungary, July 2012. Springer.

Journals

- [J1] Dániel Varró, Gergely Varró, and András Pataricza. Designing the automatic transformation of visual languages. *Science of Computer Programming*, 44(2):205–227, August 2002.
- [J2] Gergely Varró, Katalin Friedl, and Dániel Varró. Implementing a graph transformation engine in relational databases. *Software and Systems Modeling*, 5(3):313–341, September 2006.
- [J3] Ákos Horváth, Dániel Varró, and Gergely Varró. Automatic generation of platform-specific transformation. *Híradástechnika*, LXI(7):40–45, 2006.
- [J4] Gábor Bergmann, István Ráth, Gergely Varró, and Dániel Varró. Change-driven model transformations: Change (in) the rule to rule the change. *Software and Systems Modeling*, 11(3):431–461, July 2012.
- [J5] Gergely Varró, Frederik Deckwerth, Martin Wieber, and Andy Schürr. An algorithm for generating model-sensitive search plans for pattern matching on EMF models. *Software and Systems Modeling*, 14(2):597–621, May 2015.

Conferences

- [C1] Dániel Varró, Gergely Varró, and András Pataricza. Designing the automatic transformation of visual languages. In Hartmut Ehrig and Gabriele Taentzer, editors, *GRATRA 2000 Joint APPLIED GRAPH and GETGRATS Workshop on Graph Transformation Systems*, pages 14–21, Berlin, Germany, March 2000.
- [C2] Dániel Varró, Gergely Varró, and András Pataricza. Visual graph transformation in system verification. In Elena Gramatova, Hans Manhaeve, and Adam Pawlak, editors, *DDECS 2000 Design and Diagnostics of Electronic Circuits and Systems*, pages 137–141, Bratislava, Slovakia, April 2000.

- [C3] Gergely Varró and Dániel Varró. Graph transformation with incremental updates. In Reiko Heckel, editor, *Proc. of the 4th International Workshop on Graph Transformation and Visual Modeling Techniques*, volume 109 of *Electronic Notes in Theoretical Computer Science*, pages 71–83, Barcelona, Spain, December 2004. Elsevier.
- [C4] Gergely Varró. Incremental graph transformation in relational databases. In *Proc. of the 4th Conference of PhD Students in Computer Science*, page 124, Szeged, Hungary, July 2004.
- [C5] Gergely Varró. Towards incremental graph transformation in Fujaba. In Holger Giese, Andy Schürr, and Albert Zündorf, editors, *Proc. of the 2nd International Fujaba Days*, pages 3–6, Darmstadt, Germany, September 2004.
- [C6] Gergely Varró, Katalin Friedl, and Dániel Varró. Graph transformation in relational databases. In Tom Mens, Andy Schürr, and Gabriele Taentzer, editors, *Proc. of the 1st International Workshop on Graph-Based Tools*, volume 127 of *Electronic Notes in Theoretical Computer Science*, pages 167–180, Rome, Italy, October 2004. Elsevier.
- [C7] András Balogh, Gergely Varró, Dániel Varró, and András Pataricza. Compiling model transformations to EJB3-specific transformer plugins. In *Proc. of the 21st ACM Symposium on Applied Computing*, pages 1288–1295, Dijon, France, April 2006.
- [C8] Gergely Varró, Andy Schürr, and Dániel Varró. Benchmarking for graph transformation. In *Proc. of the 2005 IEEE Symposium on Visual Languages and Human-Centric Computing*, pages 79–88, Dallas, Texas, USA, September 2005. IEEE Computer Society Press.
- [C9] Gergely Varró, Dániel Varró, and Katalin Friedl. Adaptive graph pattern matching for model transformations using model-sensitive search plans. In Gabor Karsai and Gabriele Taentzer, editors, *Proc. of International Workshop on Graph and Model Transformation*, volume 152 of *Electronic Notes in Theoretical Computer Science*, pages 191–205, Tallinn, Estonia, September 2005. Elsevier.
- [C10] Gergely Varró. Gráftranszformációs benchmarkok jellemzése. In Enikő Bitay, editor, *XI. Fiatal Műszakiak Tudományos Ülésszaka*, pages 379–382, Cluj, Romania, March 2006. In Hungarian.
- [C11] Gergely Varró. Implementing an EJB3-specific graph transformation plugin by using database independent queries. In Roberto Bruni and Dániel Varró, editors, *Proc. of the 5th Workshop on Graph Transformation and Visual Modeling Techniques*, volume 211 of *Electronic Notes in Theoretical Computer Science*, pages 121–132, Vienna, Austria, April 2008. Elsevier.
- [C12] Gergely Varró, Dániel Varró, and Andy Schürr. Incremental graph pattern matching: Data structures and initial experiments. In Gabor Karsai and Gabriele Taentzer, editors, *Proc. of the 2nd International Workshop on Graph and Model Transformation*, volume 4 of *Electronic Communications of the EASST*, Brighton, United Kingdom, September 2006.
- [C13] Ákos Horváth, Gergely Varró, and Dániel Varró. Generic search plans for matching advanced graph patterns. In Karsten Ehrig and Holger Giese, editors, *Proc. of the 6th International Workshop on Graph Transformation and Visual Modeling Techniques*, volume 6 of *Electronic Communications of the EASST*, Braga, Portugal, March 2007.

- [C14] Gergely Varró. Practical issues in the implementation of graph pattern matching. In *Proc. of the 5th Hungarian-Japanese Symposium on Discrete Mathematics and Its Applications*, pages 191–200, Sendai, Japan, April 2007.
- [C15] Gergely Varró, Ákos Horváth, and Dániel Varró. Recursive graph pattern matching with magic sets and global search plans. In Andy Schürr, Manfred Nagl, and Albert Zündorf, editors, *Proc. of the 3rd International Symposium on Applications of Graph Transformation with Industrial Relevance*, volume 5088 of *Lecture Notes in Computer Science*, pages 456–470, Kassel, Germany, October 2008. Springer.
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- [C17] István Ráth, Gergely Varró, and Dániel Varró. Change-driven model transformation: Derivation and processing of change histories. In Andy Schürr and Bran Selic, editors, *Proc. of ACM/IEEE 12th International Conference on Model Driven Engineering Languages and Systems*, volume 5795 of *Lecture Notes in Computer Science*, pages 342–356, Denver, Colorado, USA, October 2009. Springer.
- [C18] András Balogh, Gábor Bergmann, György Csertán, László Gönczy, Ákos Horváth, István Majzik, András Pataricza, Balázs Polgár, István Ráth, Dániel Varró, and Gergely Varró. Workflow-driven tool integration using model transformations. In Gregor Engels, Claus Lewerentz, Wilhelm Schäfer, Andy Schürr, and Bernhard Westfechtel, editors, *Graph Transformations and Model-Driven Engineering Essays Dedicated to Manfred Nagl on the Occasion of his 65th Birthday*, volume 5765 of *Lecture Notes in Computer Science*, pages 224–248. Springer, November 2010.
- [C19] Anthony Anjorin, Gergely Varró, and Andy Schürr. Complex attribute manipulation in TGGs with constraint-based programming techniques. In Frank Hermann and Janis Voigtländer, editors, *Proc. of the 1st International Workshop on Bidirectional Transformations*, volume 49 of *Electronic Communications of the EASST*, Tallinn, Estonia, March 2012.
- [C20] Gergely Varró, Frederik Deckwerth, Martin Wieber, and Andy Schürr. An algorithm for generating model-sensitive search plans for EMF models. In Zhenjiang Hu and Juan de Lara, editors, *Proc. of the 5th International Conference on Model Transformation*, volume 7307 of *Lecture Notes in Computer Science*, pages 224–239, Prague, Czech Republic, May 2012. Springer.
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- [C22] Gergely Varró, Anthony Anjorin, and Andy Schürr. Unification of compiled and interpreter-based pattern matching techniques. In Juha-Pekka Tolvanen and Antonio Vallecillo, editors, *Proc. of the 8th European Conference on Modelling Foundations and Applications*, volume 7349 of *Lecture Notes in Computer Science*, pages 368–383, Lyngby, Denmark, July 2012. Springer.

- [C23] Marius Lauder, Anthony Anjorin, Gergely Varró, and Andy Schürr. Efficient model synchronization with precedence triple graph grammars. In Hartmut Ehrig, Gregor Engels, Hans-Jörg Kreowski, and Grzegorz Rozenberg, editors, *Proc. of the 6th International Conference on Graph Transformation*, volume 7562 of *Lecture Notes in Computer Science*, pages 401–415, Bremen, Germany, September 2012. Springer.
- [C24] Gergely Varró and Frederik Deckwerth. A Rete network construction algorithm for incremental pattern matching. In Keith Duddy and Gerti Kappel, editors, *Proc. of the 6th International Conference on Model Transformation*, volume 7909 of *LNCS*, pages 125–140, Budapest, Hungary, June 2013. Springer.
- [C25] Frederik Deckwerth and Gergely Varró. Generating preconditions from graph constraints by higher order graph transformation. In Frank Hermann and Stefan Sauer, editors, *Proc. of the 13th International Workshop on Graph Transformation and Visual Modeling Techniques*, volume 67 of *Electronic Communications of the EASST*, Grenoble, France, April 2014.
- [C26] Frederik Deckwerth and Gergely Varró. Attribute handling for generating preconditions from graph constraints. In Holger Giese and Barbara König, editors, *Proc. of the 7th International Conference on Graph Transformation*, volume 8571 of *Lecture Notes in Computer Science*, pages 81–96, York, UK, July 2014. Springer.
- [C27] Géza Kulcsár, Michael Stein, Immanuel Schweizer, Gergely Varró, Max Mühlhäuser, and Andy Schürr. Rapid prototyping of topology control algorithms by graph transformation. In Matthias Tichy and Bernhard Westfechtel, editors, *Proc. of the 8th International Workshop on Graph-Based Tools*, volume 68 of *Electronic Communications of the EASST*, York, UK, July 2014.
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- [C29] Roland Kluge, Gergely Varró, and Andy Schürr. A methodology for designing dynamic topology control algorithms via graph transformation. In Dimitris Kolovos and Manuel Wimmer, editors, *Proc. of the 8th International Conference on Model Transformation*, volume 9152 of *Lecture Notes in Computer Science*, pages 199–213, L’Aquila, Italy, July 2015. Springer.
- [C30] Michael Stein, Géza Kulcsár, Immanuel Schweizer, Gergely Varró, Andy Schürr, and Max Mühlhäuser. Topology control with application constraints. In Salil Kanhere, Jens Tölle, and Soumaya Cherkaoui, editors, *Proc. of the 40th Annual IEEE Conference on Local Computer Networks*, pages 229–232, Clearwater Beach, Florida, USA, October 2015. IEEE.

Technical reports

- [TR1] Dániel Varró, Gergely Varró, and András Pataricza. Towards an XMI-based model interchange format for graph transformation systems. Technical report, Budapest University of Technology and Economics, Department of Measurement and Information Systems, September 2000.
- [TR2] Gergely Varró, Andy Schürr, and Dániel Varró. Benchmarking for graph transformation. Technical Report TUB-TR-05-EE17, Budapest University of Technology and Economics, March

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- [TR4] Gergely Varró, Anthony Anjorin, and Andy Schürr. Unification of compiled and interpreter-based pattern matching techniques. Technical Report 2922, Technische Universität Darmstadt, March 2012. <http://tuprints.ulb.tu-darmstadt.de/2922/>.

Theses

- [Th1] Gergely Varró. Integrated formal verification of dynamic UML models. Master's thesis, Budapest University of Technology and Economics, May 2003.
- [Th2] Gergely Varró. *Advanced Techniques for the Implementation of Model Transformation Systems*. PhD thesis, Budapest University of Technology and Economics, April 2008.