Publication List

Alexander Feldman

December 1, 2009

Conferences

[1] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Computing multiple minimal diagnoses. In *Proceedings of the First Annual Conference of the Prognostics and Health Management Society (PHM'09), San Diego, California, USA*, September 2009.

[2] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Solving strong-fault diagnostic models by model relaxation. In *Proceedings of the Twenty-First International Joint Conference on Artificial Intelligence (IJCAI'09), Pasadena, California, USA*, July 2009.

[3] Alexander Feldman, Gregory Provan, and Arjan van Gemund. FRACTAL: Efficient fault isolation using active testing. In *Proceedings of the Twenty-First International Joint Conference on Artificial Intelligence (IJCAI'09), Pasadena, California, USA*, July 2009.

[4] Alexander Feldman, Gregory Provan, and Arjan van Gemund. A framework and algorithm for model-based active testing. In *Proceedings of the First International Conference on Prognostics and Health Management (PHM'08), Denver, Colorado, USA*, October 2008. **Best Student Paper Award**.

[5] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Computing observation vectors for max-fault min-cardinality diagnoses. In *Proceedings of the Twenty-Third National Conference on Artificial Intelligence (AAAI'08), Chicago, Illinos, USA*, pages 911–918, July 2008.

[6] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Computing minimal diagnoses by greedy stochastic search. In *Proceedings of the Twenty-Third National Conference on Artificial Intelligence (AAAI'08), Chicago, Illinos, USA*, pages 919–924, July 2008.

[7] Alexander Feldman, Marco Caporicci, Oscar Gracia, and André Bos. Advances in intelligent health reasoning and its application to IBDM. In *Proceedings of the IEEE Aerospace Conference, Big Sky, Montana, USA*, March 2007.

[8] Alexander Feldman, Jurryt Pietersma, and Arjan van Gemund. All roads lead to fault diagnosis: Model-based reasoning with LYDIA. In *Proceedings of the Eighteenth Belgium-Netherlands Conference on Artificial Intelligence (BNAIC'06), Namur, Belgium*, October 2006.

[9] Alexander Feldman and Arjan van Gemund. A two-step hierarchical algorithm for model-based diagnosis. In *Proceedings of the Twenty-First National Conference on Artificial Intelligence (AAAI'06), Boston, Massachusetts, USA*, July 2006.

[10] Jurryt Pietersma, Alexander Feldman, and Arjan van Gemund. Modeling and compilation aspects of fault diagnosis complexity. In *Proceedings of IEEE AUTOTESTCON'06, Anaheim, California, USA*, September 2006.

Workshops & Symposia

[1] Tolga Kurtoglu, Sriram Narasimhan, Scott Poll, David Garcia, Lukas Kuhn, Johan de Kleer, Arjan van Gemund, and Alexander Feldman. First international diagnosis competition - DXC'09. In *Proceedings of the Twentieth International Workshop on Principles of Diagnosis (DX'09), Stockholm, Sweden*, pages 383–396, June 2009.

[2] Tolga Kurtoglu, Sriram Narasimhan, Scott Poll, David Garcia, Lukas Kuhn, Johan de Kleer, Arjan van Gemund, and Alexander Feldman. Towards a framework for evaluating and comparing diagnosis algorithms. In *Proceedings of the Twentieth International Workshop on Principles of Diagnosis (DX'09), Stockholm, Sweden*, pages 373–382, June 2009.

[3] Alexander Feldman, Gregory Provan, and Arjan van Gemund. The Lydia approach to combinational model-based diagnosis. In *Proceedings of the Twentieth International Workshop on Principles of Diagnosis (DX'09), Stockholm, Sweden*, pages 403–408, June 2009.

[4] Alexander Feldman, Gregory Provan, Johan de Kleer, Lukas Kuhn, and Arjan van Gemund. Automated redesign with the General Redesign Engine. In *Proceedings of the Twentieth International Workshop on Principles of Diagnosis (DX'09), Stockholm, Sweden*, pages 307–314, June 2009.

[5] Alexander Feldman, Gregory Provan, Johan de Kleer, Lukas Kuhn, and Arjan van Gemund. Automated redesign with the General Redesign Engine. In *Proceedings of the Eighth Symposium on Abstraction, Reformulation, and Approximation (SARA'09), Lake Arrowhead, California, US*, July 2009.

[6] Alexander Feldman, Gregory Provan, and Arjan van Gemund. A framework and algorithm for model-based active testing. In *Proceedings of the Nineteenth International Workshop on Principles of Diagnosis (DX'08), Blue Mountains, Australia*, pages 71–78, September 2008.

[7] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Approximate model-based diagnosis using greedy stochastic search. In *Proceedings of the Seventh Symposium on Abstraction, Reformulation, and Approximation (SARA'07), Whistler, Canada*, pages 139–154, July 2007.

[8] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Approximate model-based diagnosis using greedy stochastic search. In *Proceedings of the Eighteenth International Workshop on Principles of Diagnosis (DX'07), Nashville, Tennessee, USA*, pages 290–297, May 2007.

[9] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Generating manifestations of max-fault min-cardinality diagnoses. In *Proceedings of the Eighteenth International Workshop on Principles of Diagnosis (DX'07), Nashville, Tennessee, USA*, pages 83–90, May 2007.

[10] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Interchange formats and automated benchmark model generators for model-based diagnostic inference. In *Proceedings of the Eighteenth International Workshop on Principles of Diagnosis (DX'07), Nashville, Tennessee, USA*, pages 91–98, May 2007.

[11] Alexander Feldman, Jurryt Pietersma, and Arjan van Gemund. A multi-valued SAT-based algorithm for faster model-based diagnosis. In *Proceedings of the Seventeenth International Workshop on Principles of Diagnosis (DX'06), Peñaranda de Duero, Burgos, Spain*, June 2006.

[12] Alexander Feldman, Arjan van Gemund, and André Bos. A hybrid approach to hierarchical fault diagnosis. In *Proceedings of the Sixteenth International Workshop on Principles of Diagnosis (DX'05), Monterey, California, USA*, pages 101–106, June 2005.

Technical Reports

[1] Alexander Feldman, Gregory Provan, and Arjan van Gemund. A family of model-based diagnosis algorithms based on Max-SAT. Technical Report ES-2009-02, Delft University of Technology, 2009.

[2] Alexander Feldman and Arjan van Gemund. Reducing the diagnostic uncertainty of a paper input module by active testing. Technical Report ES-2009-04, Delft University of Technology, 2009.

[3] Alexander Feldman and Arjan van Gemund. LYDIA user guide. Technical Report ES-2009-05, Delft University of Technology, 2007.

[4] Alexander Feldman and Arjan van Gemund. Building a LYDIA model of an Océ printer's paper input module. Technical Report TUD-SERG-2007-16, Delft University of Technology, 2007.

Journal Papers in Review

[1] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Approximate model-based diagnosis using greedy stochastic search. *Journal of Artificial Intelligence Research*, 2010. Submitted for Review.

[2] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Stochastic algorithms for sequential model/based diagnosis. *Journal of Artificial Intelligence Research*, 2010. Submitted for Review.

[3] Alexander Feldman, Tolga Kurtoglu, Sriram Narasimhan, Scott Poll, David Garcia, Johan de Kleer, Lukas Kuhn, and Arjan van Gemund. Empirical evaluation of diagnostic algorithms using a generic framework. *International Journal of Prognostics and Health Management*, 2010. Submitted for Review.