Curriculum Vitae
Alexander Feldman

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Date of Birth: September 17, 1977

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Bio

Alexander Feldman is a research scientist at the Palo Alto Research Center (PARC). Prior to joining PARC, Dr. Feldman worked as a postdoctoral researcher at University College Cork and as a a visiting researcher at Ecole Polytechnique Fédérale de Lausanne (EPFL) and at Delft University of Technology. He obtained his Ph.D. (cum laude) in Computer Science (Artificial Intelligence) and an M.Sc. (cum laude) in Parallel and Distributed Computer Systems, both from the Delft University of Technology. Dr. Feldman has over forty publications in leading conference proceedings and international journals covering topics in model-based diagnosis, artificial intelligence, and engineering. In cooperation with NASA Ames Research Center and PARC, Alexander Feldman co-organized the International Diagnostic Competitions (DXC).

Interests

model-based diagnosis, model-based automated fault isolation and recovery, model-based prognosis, testing and test generation, stochastic local search, satisfiability, constraint optimization techniques, abduction and non-monotonic reasoning, reverse engineering, algorithm design, automated reasoning, qualitative reasoning, signal processing, localization, temporal reasoning, hardware design, machine learning, simulation

Education

9/2005 – 5/2010 *Ph.D. (**cum laude**), Computer Science*
Delft University of Technology, The Netherlands
Thesis: *Approximation Algorithms for Model-Based Diagnosis*
Advisor: Prof. Arjan van Gemund

9/2002 – 9/2004 *M.Sc. (**cum laude**), Computer Science (Technical Informatics)*
Delft University of Technology, The Netherlands
Thesis: *Hierarchical Approach to Fault Diagnosis*
Advisor: Prof. Arjan van Gemund

9/1997 – 6/2000 *B.Sc., Computer Science*
UE Varna, Bulgaria

Employment

9/2014 – now	Researcher System Sciences Laboratory, Model-Based Reasoning Area Palo Alto Research Center (PARC), Inc. California, USA
6/2013 – 9/2014	Founder and President General Diagnostics, Delft, The Netherlands
6/2013 – 9/2014	Technical Consultant Nspyre, Eindhoven, The Netherlands
6/2012 – 6/2013	Research Fellow Complex Systems Laboratory University College Cork, Ireland
6/2010 – 6/2012	Visiting Postdoc Radio Frequency Integrated Circuit Group Ecole Polytechnique Fédérale de Lausanne (EPFL)
6/2010 – 6/2012	Visiting Postdoc Distributed Intelligent Systems and Algorithms Laboratory (DISAL) Ecole Polytechnique Fédérale de Lausanne (EPFL)
6/2010 – 6/2012	Postdoc Institute of Information & Communication Technology Haute Ecole d'Ingénierie et de Gestion du Canton de Vaud, Switzerland
5/2008 – 9/2008	Visiting Researcher Intelligent Systems Laboratory, Embedded Reasoning Area Palo Alto Research Center (PARC), Inc. California, USA
9/2005 – 5/2010	Doctoral Research Fellow Embedded Software Laboratory, Department of Software Technology Faculty of Electrical Engineering, Mathematics and Computer Science Delft University of Technology, The Netherlands
4/2005 – 9/2005	Software Architect Science and Technology BV, Delft, The Netherlands
9/2001 – 4/2005	Senior Programmer Market Risk Management, ING Bank, Amsterdam, The Netherlands
7/2000 – 9/2001	Senior Programmer Zend Technologies Ltd., Ramat Gan, Israel

Project Involvement

CBMx	We design and implement a Condition Based Maintenance (CBM) platform for PARC. The purpose of this platform is to provide component-based rapid prototyping environment for building custom prognostic, diagnostic, and sensor-placement solutions. The platform provides automated analytics for optimal diagnostic and prognostic decision making, comparison of algorithms, diagnostic metrics, visualization and Supervisory Control and Data Acquisition (SCADA) interfacing, code generation for diagnostics in control, instrumentation and data cleansing, signal processing, and others. The CBM platform can service electrical, thermal, mechanical, or hybrid systems. An important

application of the PARC CBM platform is to diagnose thermodynamic systems. My responsibility is to prepare a CBM use-case for thermodynamic cyber-physical system, to work on the diagnostic design aspects of the framework, to design novel algorithms and metrics and to improve state-of-the-art in diagnostic and prognostics within the framework.

CATO — CATO is a Dutch national programme (one of the participants is the Faculty of Civil Engineering and Geosciences at Delft University of Technology) whose aim is to study mechanisms for underground CO_2 capture, transport and storage. My role was to support one of the experiments and to develop VHDL/LabVIEW™ instrument for preprocessing and storing of large amount of measurement data. The instrument allows sampling of up to 32 analogue signals with soft-adjustable sampling rate and acts as an averaging oscilloscope to improve the signal-to-noise ratio of the input signal. See `http://www.co2-cato.org/` for more information.

LYDIA-NG — LYDIA-NG is a framework for Model-Based Diagnosis and is a continuation of my doctoral research. LYDIA-NG bears resemblance to products such as Dymola™ and Rodon™, however, it targets the automation of the design and implementation of decision support and diagnostic systems. The task of diagnosing a system is typically more difficult than simulation as it requires multiple simulations for various parametric values and advanced analysis for mode identification. LYDIA-NG provides modeling and scenario languages (and compilers); many state-of-the-art libraries for simulation, diagnosis, and active testing; tools and component libraries. LYDIA-NG provides own optimized simulation engines similar to the ones in the SPICE circuit simulator or in MODELICA. See `http://general-diagnostics.com/` for more information.

UWB Localization — I have participated in this large National Centers of Competence in Research (NCCR) project during a two-year postdoc in Switzerland. The idea of the UWB project was to capitalize on the research and know-how on Ultra Wide Band Technology as well as multi-robot distributed search and localization techniques acquired in previous MICS phases. One of the main goals was to build a system that allows a team of mobile robots to locate themselves and other robots with high precision (order of a cm) very frequently (maybe once per second) and securely, in order to perform collaborative, such as distributed search, coverage, or mapping. The project was focused on distributed algorithms that can be efficiently implemented and on development of low power implementations on integrated circuits. I was responsible for the design and implementation of the receiver firmware and data acquisition algorithms. This project has been carried-out in collaboration with researchers from Ecole Polytechnique Fédérale de Lausanne (EPFL).

GENIUS — Decision support system for diagnosis satellite electrical power systems. GENIUS takes model-based diagnosis one step closer to the end-user by analyzing the real-world case of the Goce satellite. I have applied model-based diagnosis and active testing to data simulated with the SIMSAT ESA operational simulator. The results showed very good diagnostic performance (measured by performance metrics) which convinced end-users that model-based diagnosis and active testing is a mature technology, ready to be used in a wide-class of real-world systems. This project has been awarded by the European Space Agency under the Innovative Triangle Initiative program.

DXF — The DXC Framework (DXF), developed jointly with NASA Ames and PARC, is a collection of programs and APIs for running and evaluating diagnostic algorithms. DXF allows systematic comparison and evaluation of diagnostic algorithms under identical experimental conditions. The key components of this framework include representation languages for the physical system description, sensor data and diagnosis results, a

runtime architecture for executing diagnostic algorithms and diagnostic scenarios, and an evaluation component that computes performance metrics based on the results from diagnostic algorithm execution.

LYDIA — LYDIA implements a big number of algorithms developed through my doctoral work. LYDIA stands for Language for sYstem DIAgnosis and it is a modeling language and a reasoning tool-kit biased (e.g., there is support for health modeling) towards model-based fault diagnosis. One of the objectives of LYDIA is to to implement novel algorithms which will push the frontiers of model-based diagnosis allowing efficient reasoning over larger systems. Responsible for the framework and modeling language design and implementation and the development of fast algorithms for model-based diagnosis.

FINESSE — The project FINESSE (Fault dIagNosis for Embedded SyStems dEpendability) aims at the improvement of the accuracy of fault diagnosis when applied to electromechanical systems such as the Paper Handling Systems of Océ Copiers. The challenges in fault diagnosis are to infer maximum diagnostic information on the operational status of software and hardware components from a typically limited amount of (noisy) observations. Responsible for the modeling of the system and the design of algorithms for active testing, recovery and prognosis.

DIF — The Diagnosis Interchange Format (DIF) is an XML-based interchange format for Model-Based Diagnosis (MBD). Its main purposes are to allow sharing of diagnostic models, observation data and fault hypotheses, and to facilitate empirical comparative study of the performance of existing and future MBD implementations. Responsible for the DIF schema design and the construction of MBD benchmark suite.

Professional Activities

PC Member
Thirteen AAAI Conference on Artificial Intelligence (AAAI'16)
International Conference on Prognostics and Health Management 2015 (PHM'15)
International Workshop on Principles of Diagnosis 2015 (DX'15)
International Workshop on Principles of Diagnosis 2014 (DX'14)
International Workshop on Principles of Diagnosis 2013 (DX'13)
European Conference on Artificial Intelligence 2012 (ECAI'12)
International Conference on Principles of Knowledge Representation and Reasoning 2012 (KR'12)
International Workshop on Principles of Diagnosis 2011 (DX'11)

Reviewer
Journal of Vibration and Control
Journal on Artificial Intelligence (AIJ)
Journal of Universal Computer Science (JUCS)
Journal on Systems, Man and Cybernetics (SMC)
IEEE Transactions on Reliability (TREL)
International Workshop on Principles of Diagnosis 2010 (DX'10)
International Workshop on Principles of Diagnosis 2009 (DX'09)
International Joint Conference on Artifical Intelligece (IJCAI'13)
International Conference on Prognostics and Health Management 2011 (PHM'11)
International Conference on Prognostics and Health Management 2008 (PHM'08)

Organizer
International Workshop on Principles of Diagnosis 2013 (DX'13)
Workshop on Diagnostic Reasoning and Model Analysis at European Conference on Artificial Intelligence 2012 (ECAI'12)
Third International Diagnostic Competition (DXC'11)
Second International Diagnostic Competition (DXC'10)
First International Diagnostic Competition (DXC'09)

Teaching Experience

7/2011 – 7/2011 Artificial Intelligence, California State University, Long Beach
Part of the summer university program which is an initiative launched in 2006 by the Board of Higher Education of the Canton of Vaud together with several partner universities.

9/2007 – 10/2007 Model-Based Computing, Delft University of Technology
Teaching assistant, but also designed the course and gave most of the lectures. This was an optional first-year M.Sc. course and was attended by approximately forty students.

2/2007 – 3/2007 Model-Checking, Delft University of Technology
Teaching assistant

Scholarship and Prizes

Ph.D. cum laude

M.Sc. cum laude

Best paper award at the First International Conference on Prognostics and Health Management 2008 (PHM'08)

Gold Leaf certificate at the Seventh Conference on Ph.D. Research in Microelectronics & Electronics 2011 (PRIME'11)

Technical Skills

Proficient

Linux, Solaris, IRIX, HP-UX, Windows, ChibiOS/RT
C/C++, Boost, Qt, Python, PHP, Flex/Bison, LaTeX
VHDL, Verilog
MPI, PVM
Markup languages, SOAP
Sybase, Oracle, MySQL, PostgreSQL
Maple, Matlab, Modelica (Dymola and Open Modelica), LabView

Familiar

Java, Perl, Tcl/Tk, Prolog, Lisp, Pascal, Fortran
Hadoop

Citizenship

Dutch

Languages

English, Bulgarian, Russian (intermediate), Hebrew (basic), Dutch (intermediate)

References

Referee 1: Prof. Arjan van Gemund
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Referee 3: Dr. Stephan Robert

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Switzerland

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Publications

Books and Collections

[1] Alexander Feldman, Meir Kalech, and Gregory Provan, editors. *Proceedings of the Twenty-Fourth International Workshop on Principles of Diagnosis: DX-2013*, 2013.

[2] Yannick Pencolé, Alexander Feldman, and Alban Grastien, editors. *Proceedings of the Diagnostic REAsoning: Model Analysis and Performance Workshop DREAMAP-2012 at ECAI-2012*, 2012.

[3] Alexander Feldman. *Approximation Algorithms for Model-Based Diagnosis*. PhD thesis, Delft University of Technology, 2010.

Journal Papers

[1] Alexander Feldman, Johan de Kleer, Tolga Kurtoglu, Sriram Narasimhan, Scott Poll, David Garcia, Lukas Kuhn, and Arjan van Gemund. The diagnostic competitions. *AI Magazine*, 2014.

[2] Alexander Feldman, Gregory Provan, and Arjan van Gemund. A model-based active testing approach to sequential diagnosis. *Journal of Artificial Intelligence Research*, 39:301–334, 2010.

[3] Alexander Feldman, Tolga Kurtoglu, Sriram Narasimhan, Scott Poll, David Garcia, Johan de Kleer, Lukas Kuhn, and Arjan van Gemund. Empirical evaluation of diagnostic algorithm performance using a generic framework. *International Journal of Prognostics and Health Management*, pages 1–28, 2010.

[4] Alexander Feldman, Gregory Provan, and Arjan van Gemund. Approximate model-based diagnosis using greedy stochastic search. *Journal of Artificial Intelligence Research*, 38:371–413, 2010.

Conferences

[1] Alexander Feldman, Gregory Provan, Rui Abreu, and Johan de Kleer. Model-based diagnosis using component model ensembles. In *Proceedings of the Ninth IFAC Symposium on Fault Detection, Supervision and Safety of Technical Processes (SAFEPROCESS'15)*, pages 1–6, 2015.

[2] Roni Tzvi Stern, Meir Kalech, Shelly Rogov, and Alexander Feldman. How many diagnoses do we need? In *Proceedings of the Twenty-Ninth Conference on Artificial Intelligence (AAAI'15)*, 2015.

[3] Alexander Feldman and Gregory Provan. Diagnosing analogue linear systems using dynamic topological reconfiguration. In *Proceedings of the Twenty-Eighth Conference on Artificial Intelligence (AAAI'14)*, 2014.

[4] Alexander Feldman, Helena Vicente de Castro, Arjan van Gemund, and Gregory Provan. Model-based diagnostic decision-support system for satellites. In *Proceedings of the IEEE Aerospace Conference, Big Sky, Montana, USA*, pages 1–14, March 2013.

[5] Lior Rokach, Meir Kalech, Gregory Provan, and Alexander Feldman. Machine-learning-based circuit synthesis. In *Proceedings of the Twenty-Third International Joint Conference on Artificial Intelligence (IJCAI'13)*, pages 1635–1641, 2013.

[6] Lior Rokach, Alexander Feldman, Meir Kalech, and Gregory Provan. Machine-learning-based circuit synthesis. In *Proceedings of the Twenty-Seventh IEEE Convention of Electrical & Electronics Engineers in Israel (IEEEI'12)*, pages 1–5. IEEE, 2012.

[7] Roni Stern, Meir Kalech, Alexander Feldman, and Gregory Provan. Exploring the duality in conflict-directed model-based diagnosis. In *Proceedings of the Twenty-Sixth Conference on Artificial Intelligence (AAAI'12), Toronto, Canada*, July 2012.

[8] Alexander Bahr, Alexander Feldman, James Colli-Vignarelli, Stephan Robert, Catherine Dehollain, and Alcherio Martinoli. Modeling and benchmarking ultra-wideband localization for mobile robots. In *Proceedings of the 2012 IEEE International Conference on Ultra-Wideband (ICUWB'12)*, pages 443–447, September 2012.

[9] Alexander Feldman, Alexander Bahr, James Colli-Vignarelli, Stephan Robert, Catherine Dehollain, and Alcherio Martinoli. Toward the deployment of an ultra-wideband localization test bed. In *Proceedings of the Seventy-Fourth IEEE Conference on Vehicular Technology (VTC'11-Fall), San Francisco, California, USA*, pages 1–5, 2011.

[10] James Colli-Vignarelli, Alexander Feldman, Stephan Robert, and Catherine Dehollain. A discrete-component Impulse-Radio Ultra-Wide Band (IR-UWB) receiver with I/Q demodulation. In *Proceedings of the Seventh Ph.D. Conference on Research in Microelectronics and Electronics (PRIME'11), Trento, Italy*, pages 245–248, July 2011. **Gold Leaf Certificate**.

[11] 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.

[12] 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*, pages 785–790, July 2009.

[13] 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*, pages 778–784, July 2009.

[14] 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**.

[15] 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, Illinois, USA*, pages 911–918, July 2008.

[16] 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, Illinois, USA*, pages 919–924, July 2008.

[17] 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.

[18] 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.

[19] 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.

[20] 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] Alexander Feldman and Gregory Provan. Optimizing model-based diagnosis complexity for analogue linear systems. In *Proceedings of the Twenty-Fourth International Workshop on Principles of Diagnosis (DX'13), Jerusalem, Israel*, pages 2–8, 2013.

[2] Anibal Bregon, Alexander Feldman, Gregory Provan Belarmino Pulido, and Carlos Alonso González. Improving the diagnostic performance for dynamic systems by using conflict-driven model decomposition. In *Proceedings of the Twenty-Fourth International Workshop on Principles of Diagnosis (DX'13), Jerusalem, Israel*, pages 105–110, 2013.

[3] Alexander Feldman, Helena Vicente de Castro, Arjan van Gemund, and Gregory Provan. Model-based diagnostic decision-support system for satellites. In *Proceedings of the Twenty-Fourth International Workshop on Principles of Diagnosis (DX'13), Jerusalem, Israel*, pages 111–122, 2013.

[4] Roni Stern, Meir Kalech, Alexander Feldman, Shelly Rogov, and Tom Zamir. Finding all subset minimal diagnoses is redundant. In *Proceedings of the Twenty-Fourth International Workshop on Principles of Diagnosis (DX'13), Jerusalem, Israel*, pages 15–21, 2013.

[5] Roni Stern, Meir Kalech, Alexander Feldman, and Gregory Provan. Exploring the duality in conflict-directed model-based diagnosis. In *Proceedings of the Twenty-Third International Workshop on Principles of Diagnosis (DX'12), Great Malvern, United Kingdom*, 2012.

[6] Alexander Feldman, Johan de Kleer, and Gregory Provan. Computing manifestations of max-size min-cardinality ambiguity groups. In *Proceedings of the Diagnostic Reasoning: Model Analysis and Performance ECAI Workshop (DREAMAP'12)*, pages 26–33, 2012.

[7] Alexander Feldman, Tom Janssen, and Arjan van Gemund. Modeling diagnostic stochastic search. In *Proceedings of the Twenty-Second International Workshop on Principles of Diagnosis (DX'11), Munich, Germany*, pages 1–6, October 2011.

[8] Alexander Feldman, Gregory Provan, Johan de Kleer, Stephan Robert, and Arjan van Gemund. Solving model-based diagnosis problems with Max-SAT solvers and vice versa. In *Proceedings of the Twenty-First International Workshop on Principles of Diagnosis (DX'10), Portland, Oregon, USA*, pages 185–192, October 2010.

[9] 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.

[10] 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.

[11] 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.

[12] 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.

[13] 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.

[14] 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.

[15] 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.

[16] 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.

[17] 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.

[18] 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.

[19] 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.

[20] 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.