

Publications

Books

- T. Nanya, F. Maruyama, A. Pataricza, M. Malek (eds.): Service Availability, 5th International Service Availability Symposium, ISAS 2008, Tokyo, Japan, May 19-21, 2008, Proceedings [Springer 2008](#)
- M. Malek, M. Reitenspieß, A. P. A. van Moorsel (eds.): Service Availability, 4th International Service Availability Symposium, ISAS 2007, Durham, NH, USA, May 21-22, 2007, Proceedings [Springer 2007](#)
- M. Malek, E. Nett, N. Suri (eds.): Service Availability, Second International Service Availability Symposium, ISAS 2005, April 25-26, 2005, Revised Selected Papers [Springer 2005](#)
- M. Malek, M. Reitenspieß, J. Kaiser (eds.): Service Availability, First International Service Availability Symposium, ISAS 2004, Munich, Germany, May 13-14, 2004, Revised Selected Papers [Springer 2005](#)
- M. Malek, P. Ibach: [Entrepreneurship, Prinzipien, Ideen und Geschäftsmodelle zur Unternehmensgründung im Informationszeitalter](#), dpunkt.verlag, January 2004
- D. S. Fussell, M. Malek: Responsive Computer Systems: Steps Towards Fault-Tolerant Real-Time Systems, ISBN: 0792395638, Kluwer Academic Publishers, 1995, <http://www.springer.com/computer/communications/book/978-0-7923-9563-8>
- M. Malek: Responsive Computing, Special Issue of Real Time Systems, the International Journal of Time-Critical Computing Systems, vol. 7, no.3 1994, ISBN: 0792395115, Kluwer Academic Publishers, 1994, <http://www.springer.com/computer/communications/book/978-0-7923-9511-9>
- M. Malek: High-Performance Computing in Europe, ISBN: 1568063059, DIANE Publishing Company, 1993, <http://www.dianepublishing.net/SearchResults.asp?Search=1568063059&Search.x=25&Search.y=9>
- G. J. Lipovski, M. Malek: Parallel Computing: Theory and Comparisons, John Wiley-Interscience, 1987, <http://portal.acm.org/citation.cfm?id=23248&dl=ACM&coll=GUIDE>

Book chapters

- Milosevic, J., Regazzoni F., Malek M. "Malware Threats and Solutions for Trustworthy Mobile Systems Design", Hardware Security and Trust: Design and Deployment of Integrated Circuits in a Threatened Environment, Springer, 2017
- Yoshiaki Kakuda, Tomoyuki Ohta and Miroslaw Malek, Self-Organizing Real-Time Services in Mobile Ad Hoc Networks, Chapter 3 in Self-Organization in Embedded Real-Time Systems (eds. M. Teresa Higuera-Toledano, Uwe Brinkschulte and Achim Rettberg) Springer, New York, 2013, pp. 55-74.

- Salfner, F.; Malek, M.; Architecting Dependable Systems with Proactive Fault Management Architecting Dependable Systems 7, 2010
- B. Milic, M. Malek: Properties of Wireless Multihop Networks in Theory and Practice. In: Handbook of Wireless Ad Hoc and Sensor Networks. Springer Verlag, 2009
- N. Milanovic, M. Malek: Adaptive Search- and Learning-based Approaches for Automatic Web Service Composition, Web Services Research and Practices, Volume 2,] 2008
- N. Milanovic, M. Malek: Adaptive Search and Learning-Based Approaches for Automatic Web Service, Book chapter "Modern Technologies in Web Services Research" Liang-Jie Zhang (Ed.), 2008 <http://www.igi-global.com/books/details.asp?id=7640>
- B. Milic, M. Malek: Properties of wireless multihop networks in theory and practice, Handbook of Wireless Ad Hoc and Sensor Networks, S. Misra (Ed.), Springer Verlag, 2008 http://www.biggerbooks.com/bk_detail.aspx?isbn=9781848003279
- M. Malek: A Perspective on Parallel and Distributed Computing, in: Informatik- Aktuelle Themen im historischen Kontext, W. Reisig, J.-C. Freytag (eds.), Springer, 2006 <http://www.springerlink.com/content/l125x530m737u348/>
- F. Salfner, G. A. Hoffmann, M. Malek: Prediction-based Software Availability Enhancement, In: Self-Star Properties in Complex Information Systems; Editors: O. Babaoglu, M. Jelasity, A. Montresor, C. Fetzer, S. Leonardi, A. van Moorsel and M. van Steen LNCS, vol. 3460, hot topics series; Springer-Verlag; Berlin 2005 <http://www.springerlink.com/content/v8rvww0yhr68dug5/>
- M. Malek: Operating Systems, Encyclopedia of Life Support Systems (EOLSS), 2001, <http://www.eolss.net/>
- M. Malek: Responsive Computer Systems, in: the Encyclopedia of Microcomputers, A. Kent and J. G. Williams (eds.), Vol. 37, Supplement 22, 323-330, Marcel Dekker, New York, 1997
- M. Malek: Responsive Computer Systems, in the Encyclopedia of Microcomputers, A. Kent and J. G. Williams (eds.), Vol. 13, 107-127, Marcel Dekker, New York, 1997
- M. Malek: A Consensus-Based Framework and Model for the Design of Responsive Computing Systems in: Ultradependable Parallel and Distributed Computing, G. Koob and C. Lau (eds.), Kluwer, 1994
- M. Malek: Parallel and Distributed Computing, in the Encyclopedia of Microcomputers, A. Kent and J. G. Williams (eds.), Vol. 13, 107-127, Marcel Dekker, New York, 1993
- M. Malek: Parallel and Distributed Computing, in the Encyclopedia of Computer Science and Technology, A. Kent and J. G. Williams (eds.), Vol. 24, Supplement 9, 295-315, Marcel Dekker, New York, 1991

- D. Fussell, M. Malek, S. Rangarajan: Wafer-Scale Testing/Design for Testability, in the book titled Wafer Scale Integration, E. E. Swartzlander, Jr. (ed.), Chapter 9, 413-472, Kluwer, Boston, 1989
- M. Malek: Parallel Computer Systems Testing and Integration, in the book titled Testing and Diagnosis of VLSI and ULSI, F. Lombardi and M. G. Sami (eds.), 93-116, Kluwer, Boston, 1988
- Y-H. Choi, D. S. Fussell, M. Malek: Token-Triggered Systolic Diagnosis of Wafer-Scale Arrays, in the book titled Wafer Scale Integration, C. Jesshope and W. Moore (eds.), Adam Hilger, Bristol and Boston, 246-258, 1986 (presented at Wafer-Scale Integration Workshop in England, July 1985)

Refereed journal and conference publications

- Chuah E., A Jhumka, M Malek, N Suri, "[A survey of log-correlation tools for failure diagnosis and prediction in cluster systems](#)", IEEE Access 10, 133487-133503, 2023
- Malek M., "Monitorology – the Art of Observing the World", TASK Quarterly, Vol. 25 No. 2, 2021 (also arXiv_1902.09459)
- Bianchi, F. Maria, L. Livi, A. Ferrante, J. Milosevic, and M. Malek, "Time series kernel similarities for predicting Paroxysmal Atrial Fibrillation from ECGs", IJCNN 2018 : International Joint Conference on Neural Networks, Rio, Brazil, IEEE, 07/2018
- Ferrante, A., M. Malek, F. Martinelli, F. Mercaldo, and J. Milosevic, "Extinguishing Ransomware - A Hybrid Approach to Android Ransomware Detection", Foundations and Practice of Security, vol. 10723, Cham, Springer International Publishing, pp. 242-258, 02/2018.
- Kaitovic, I., and M. Malek, "Impact of Failure Prediction on Availability: Modeling and Comparative Analysis of Predictive and Reactive Methods", IEEE Transactions on Dependable and Secure Computing, 2018.
- Milosevic, J., F. Regazzoni, and M. Malek, "Malware Threats and Solutions for Trustworthy Mobile Systems Design", Hardware Security and Trust: Design and Deployment of Integrated Circuits in a Threatened Environment, First edition; 2016: Springer, pp. 149-167, 2017.
- Milosevic, J., M. Malek, and A. Ferrante, "Runtime Classification of Mobile Malware for Resource-constrained Devices", Lecture Notes in Communications in Computer and Information Science, vol. 764: Springer International Publishing AG, pp. 195-215, 2017.
- Ferrante, A., M. Malek, F. Martinelli, F. Mercaldo and J. Milosevic: Extinguishing Ransomware - a Hybrid Approach to Android Ransomware Detection, The 10th International Symposium on Foundations Practice of Security, Nantes, 2017
- Malek, M.: Predictive Analytics: A Shortcut to Dependable Computing (invited article), Lecture Notes in Computer Science, 10479, SERENE 2017: , Springer, 3-17, September 2017

- Igor Kaitovic, Filip Obradovic, Slobodan Lukovic, and Miroslaw Malek, "A framework for disturbance analysis in smart grids by fault injection," Journal on Computer Science - Research and Development (CSR D), pp. 93-103, Springer, March, 2017
- Mariagiovanna Sami, Miroslaw Malek, Umberto Bondi, Francesco Regazzoni: Embedded systems education: job market expectations. [SIGBED](#) Review 14(1): 22-28 (2016), October, 2016
- Milosevic, J., Ferrante A., Malek M. "Trojan Families Identification Using Dynamic Features and Low Complexity Classifiers", 24th EICAR Annual Conference on Trustworthiness in IT Security Products, [EICAR-2016](#), Nuremberg, Germany, October, 2016
- Jelena Milosevic, Alberto Ferrante, Miroslaw Malek: MalAware: Effective and Efficient Run-Time Mobile Malware Detector. [DASC/PiCom/DataCom/CyberSciTech 2016](#): 270-277, Auckland, New Zealand, August, 2016
- Igor Kaitovic, Miroslaw Malek: Optimizing Failure Prediction to Maximize Availability. [ICAC 2016](#): 111-116, Wuerzburg, Germany, July, 2016
- Slobodan Lukovic, Igor Kaitovic, Gerardo Lecuona, Miroslaw Malek: A Methodology for Proactive Maintenance of Uninterruptible Power Supplies. [LADC 2016](#): 183-186, Cali, Colombia, October, 2016
- Sebastien Bellon, Claudio Favi, Miroslaw Malek, Marco Macchetti, Francesco Regazzoni: Evaluating physically unclonable functions on a large set of FPGAs. [SAMOS 2016](#): 188-195, Samos Islands, Greece, July, 2016
- Jelena Milosevic, Miroslaw Malek, Alberto Ferrante: A Friend or a Foe? Detecting Malware using Memory and CPU Features. [SECURITY 2016](#): 73-84, Lisbon, Portugal, July, 2016
- Sebastien Bellon, Claudio Favi, Miroslaw Malek, Marco Macchetti, Francesco Regazzoni: Evaluating the Impact of Environmental Factors on Physically Unclonable Functions (Abstract Only). [FPGA 2016](#): 279, Monterey, CA, USA, February, 2016
- Milosevic, J., A. Ferrante, and M. Malek, "What Does the Memory Say? Towards the most indicative features for efficient malware detection", CCNC 2016, The 13th Annual IEEE Consumer Communications & Networking Conference, Las Vegas, NV, USA, IEEE Communication Society, January 2016
- Kaitović, I., S. Luković, and M. Malek, "Proactive Failure Management in Smart Grids for Improved Resilience (A Methodology for Failure Prediction and Mitigation)", IEEE GLOBECOM SmartGrid Resilience (SGR) Workshop, San Diego, CA, USA, December 2015
- Balać, K., M. Prevostini, and M. Malek, "Optimizing Sensor Nodes Placement for Fault-tolerant Trilateration-based Localization", IEEE Pacific Rim International Symposium on Dependable Computing (PRDC), Zhangjiajie, China, November 2015
- Kaitović, I., S. Luković, and M. Malek, "Unifying Dependability of Critical Infrastructures: Electric Power System and ICT (Concepts, Figures of Merit and Taxonomy)", IEEE Pacific Rim

International Symposium on Dependable Computing (PRDC), Zhangjiajie, China, November 2015

- Milosevic, J., A. Ferrante, and M. Malek, "Can we Achieve both Privacy Protection and Efficient Malware Detection on Smartphones?", 1st Interdisciplinary Cyber Research Workshop 2015, Tallin, Estonia, Tallinn University of Technology, July, 2015
- Milosevic, J., A. Ferrante, and M. Malek, "A General Practitioner or a Specialist for Your Infected Smartphone?", 36th IEEE Symposium on Security and Privacy, San Jose, CA, USA, IEEE Computer Society Technical Committee on Security and Privacy, May 2015
- Dittrich A., D. Solis H., P. Coto and M. Malek, Responsiveness of Service Discovery in Wireless Mesh Networks. The 20th IEEE Pacific Rim International Symposium on Dependable Computing (PRDC 2014), November 2014
- Sami, M., M. Malek, U. Bondi and F. Regazzoni, Embedded Systems Education: Job Market Expectations, 2014 Workshop on Embedded and Cyber-Physical Systems Education (WESE), Delhi, India, November 2014
- Milosevic, J., A. Dittrich, M. Malek, and A. Ferrante, A Resource-optimized Approach to Efficient Early Detection of Mobile Malware, International Workshop on Security of Mobile Applications I - IWSMA I, ARES2014, September 2014
- Milosevic J., A. Dittrich, A. Ferrante, M. Malek, C. R. Quiros, R. Braojos, G. Ansaloni, and D. Atienza. Risk assessment of atrial fibrillation: a failure prediction approach. In Computing in Cardiology (CinC), Cambridge, MA, USA, September 2014
- Dittrich, A., B. Lichtblau, R. Rezende, and M. Malek, Modeling Responsiveness of Decentralized Service Discovery in Wireless Mesh Networks, Proc. of 17th International GI/ITG Conference on "Measurement, Modelling and Evaluation of Computing Systems" and "Dependability and FaultTolerance", vol. 8376: Springer International Publishing Switzerland, pp. 88-102, 2014
- R. Rezende, Rafael, A. Dittrich, and M. Malek: User-Perceived Instantaneous Service Availability Evaluation, Proceedings of Pacific Rim International Symposium on Dependable Computing (PRDC). Vancouver, Canada: IEEE Computer Society, December 2013
- Milic B. and M. Malek, Generating Realistic Node Mobility and Placement for Wireless Multi-Hop Network Simulation, IEICE Transactions 95-B(9): 2682-2690, 2012
- Malek M., Securability: the Key Challenge for Autonomic and Trusted Computing, Proceedings of 9th International Conference on Ubiquitous Intelligence Computing and 9th International Conference on Autonomic Trusted Computing (UIC/ATC), 2012
- V. Stantchev, M. Malek: Addressing Dependability throughout the SOA Live Cycle, IEEE Transactions on Services Computing, Vol. 4, No. 2, pp. 85-95, 2011
- M. Goldszmidt, M. Malek, S. Nadjm-Tehrani, P. Narasimhan, F. Salfner, P. Ward, J. Wilkes: Towards a Holistic Approach to Fault Management: Wheels within a Wheel, in:

Dependability and Computer Engineering: Concepts for Software-Intensive Systems, L. Petre, K. Sere, E. Troubitsyna, Eds., IGI Global, Hershey, PA, USA, pp. 1-10, 2011

- Y. Kakuda, M. Malek: A Unified Design Model for Assurance Networks and its Application to Mobile Ad Hoc Networks, Proceedings of the 10th International Workshop on Assurance in Distributed Systems and Networks (ADSN), Hiroshima, Japan, 2011
- S. Jha, A. Krdu, M. Malek: Minimizing Restart Time for Fast Rejuvenation and Availability Enhancement, Proceedings of 10th International Workshop on Assurance in Distributed Systems and Networks (ADSN), Hiroshima, Japan, 2011
- M. Malek: The Permanent Challenge: How to Enhance Assurance to Users of Computer and Communication Systems?, Panel Contribution, Proceedings of 10th International Workshop on Assurance in Distributed Systems and Networks (ADSN), Hiroshima, Japan, 2011
- M. Malek: Dependability Challenges in the Age of Omnipresent Computing, Panel Contribution, 41st Dependable Systems and Networks, Hong Kong, China, 2011
- B. Milic, M. Malek: Accuracy of Link Status Detection in Wireless Multi-hop Networks. In: 13th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWIM), October 2010
- Salfner, F.; Lenk, M. and Malek, M.: A Survey of Online Failure Prediction Methods; ACM Computing Surveys, 42(3), pp. 1-42, March 2010
- J. Calta, M. Malek: Formal Analysis of Fault Recovery in Self-Organizing Systems, Proceedings of the 8th International Conference on Dependable, Autonomic and Secure Computing (DASC 2009), Chengdu, China, December 2009
- T. Goldschmidt, A. Dittrich, M. Malek: Quantifying Criticality of Dependability-Related IT Organization Processes in CobiT, Proceedings of the IEEE 15th Pacific Rim International Symposium on Dependable Computing (PRDC 09), Shanghai, China, November 2009
- M. Vieira, H. Madeira, I. Irrera, M. Malek: Fault Injection for Failure Prediction Methods Validation, 5th Workshop on Hot Topics in System Dependability (HotDep 2009), Dependable Systems and Networks, Estoril, Portugal, June 2009
- F. Salfner, M. Lenk, M. Malek: A Survey of Online Failure Prediction Methods, ACM Computing Surveys, 2009
- B. Milic, M. Malek: NPART-Node Placement Algorithm for Realistic Topologies in Wireless Multihop Network Simulation, 2nd International Conference on Simulation Tools and Techniques, Rome, Italy, March 2009
- D. Tutsch, M. Malek: Comparison of Networks-on-Chip Topologies for Multicore Systems Considering Multicat and Local Traffic, 2nd International Conference on Simulation Tools and Techniques, Rome, Italy, March 2009

- M. Malek: Getting Closer to Reality: Runtime Monitoring, Variable Section and Model Reevaluation, Proceedings of International Workshop on Dependable Network Computing and Mobile Systems (DNCMS 2008), Naples, Italy, October 2008
- A. Dittrich, J. Kowal, M. Malek: Designing Survivable Services from Independent Components with Basic Functionality, Proceedings of International Workshop on Dependable Network Computing and Mobile Systems (DNCMS 2008), Naples, Italy, October 2008
- N. Milanovic, B. Milic, M. Malek: Modeling Business Process Availability, IEEE International Workshop on Methodologies for Non-functional Properties in Services Computing (MNPSC), Hawaii, July 2008, <http://doi.ieeecomputersociety.org/10.1109/SERVICES-1.2008.9>
- M. Malek, B. Milic, N. Milanovic: Analytical Availability Assessment of IT Services, Proceedings of International Service Availability Symposium (ISAS2008), Tokio, Japan, LNCS, Springer Verlag, 2008
- M. Malek: The Art of Creating Models and Models Integration, Proceedings of 1st International Workshop on Model-Based Software and Data Integration - MBSDI 2008, Communications in Computer and Information Science, Springer Verlag, Berlin, April 2008, <http://cis.cs.tu-berlin.de/Forschung/Projekte/bizycle/mbsdi2008/Program.html>
- M. Malek: Online Dependability Assessment through Runtime Monitoring and Prediction, Panel Contribution, 7th European Dependable Computing Symposium, EDCC-7, Vilnius, Lithuania, May 2008, <http://doi.ieeecomputersociety.org/10.1109/EDCC-7.2008.27>
- S. Brüning, S. Weißleder, M. Malek: A Fault Taxonomy for Service-Oriented Architecture, Fast Abstract in: 10th IEEE High Assurance Engineering Symposium (HASE'07), Dallas, Texas, November 14-16, 2007
<http://www.ieeexplore.ieee.org/xpl/RecentCon.jsp?punumber=4404711>
- B. Milic, M. Malek: Analyzing Large Scale Real-World Wireless Multihop Network, in: IEEE Communication Letters, July 2007
http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4273767
- B. Milic, M. Malek: Adaptation of Breadth First Search Algorithm for Cut-edge Detection in Wireless Multihop Networks, in: Proceedings of the 10th ACM-IEEE International Symposium on Modeling, Analysis and Simulation of Wireless and Mobile Systems (MSWIM 2007)
<http://doi.acm.org/10.1145/1298126.1298192>
- P.W. Chan, M.R. Lyu, M. Malek: Reliable Web Services: Methodology, Experiment and Modeling, IEEE International Conference on Web Services (ICWS 2007), Salt Lake City, USA, July 2007
http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=4279659&isnumber=4279553
- G.A. Hoffmann, K.S. Trivedi, M. Malek: A best practice guide to resource forecasting for computing systems, IEEE Transaction on Reliability, December 2007
<http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/24/4384598/04378407.pdf?isnumber=4384598&arnumber=4378407>

- C. Johnson, M. Malek et al.: Progress achieved in the research area of Critical Information Infrastructure Protection by the IST-FP6 Projects CRUTIAL, IRRIS and GRID, EU Report, March 2007 ftp://ftp.cordis.europa.eu/pub/fp7/ict/docs/security/progressreport-ciip-07-06-27_en.pdf
- F. Salfner, M. Malek: Using hidden semi-markov models for effective online failure prediction, Proceedings of 26th IEEE International Symposium on Reliable Distributed Systems, (SRDS2007), 2007, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=4365693&isnumber=4365669
- N. Milanovic, M. Malek: Service-Oriented Operating System: A Key Element in Improving Service Availability, Proceedings of International Service Availability Symposium (ISAS2007), pp. 31-42, Lecture Notes in Computer Science 4526, Springer, 2007
- R. Baldoni, M. Malek, A. Milani, S. Tucci Piergiovanni: Weakly-Persistent Causal Objects in Dynamic Distributed Systems, in: Proceedings of SRDS 2006, Leeds, UK, October 2006, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4032478
- G. Hoffmann, M. Malek: Call Availability Prediction in a Telecommunication System: A Data Driven Empirical Approach, in: 25th IEEE Symposium on Reliable Distributed Systems (SRDS 2006), Leeds, UK, October 2006 <http://doi.ieeecomputersociety.org/10.1109/SRDS.2006.12>
- G. Hoffmann, K. Trivedi, M. Malek: A Best Practice Guide to Resource Forecasting for the Apache Webserver, in: 12th IEEE International Symposium Pacific Rim Dependable Computing (PRDC'06), University of California, Riverside, USA, December 2006 <http://doi.ieeecomputersociety.org/10.1109/PRDC.2006.5>
- G. Hoffmann, K. Trivedi, M. Malek: Invariant Detection for Apache Server Systems, in: Duke University - Pratt School of Engineering, Humboldt-Universität u Berlin, Institut für Informatik, 2006
- P.K. Ibach, G. Tamm, M. Malek: Towards a Global Real-Time Enterprise, in: B. N. Hilton (editor) Emerging Spatial Information Systems and Applications, Idea Group, Information Science Publishing, IRM Press, October 2006, <http://training.esri.com/campus/library/Bibliography/RecordDetail.cfm?ID=64898>
- N. Milanovic, M. Malek: Search Strategies for Automatic Web Service Composition, in: International Journal of Web Services Research 3(2), pp 1-32, 2006, <http://www.igi-global.com/articles/details.asp?id=5964>
- B. Milic, M. Malek: Dropped Edges and Faces' Size in Gabriel and Relative Neighborhood Graphs, in: Proceedings of The Third IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2006), Vancouver, Canada, October 2006, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=4053926&isnumber=4053890
- P.W. Chan, M.R. Lyu, M. Malek: Making Services Fault Tolerant, in: 3rd International Service Availability Symposium (ISAS2006), Helsinki, 2006

- J. Richling, M. Malek: Message Scheduled System: A Composable Architecture for Embedded Real-Time Systems, in: Proceedings of First GI/ITG Workshop on Non-Functional Properties of Embedded Systems (NFPEs), Nürnberg, March 2006, <http://wotan.liu.edu/docis/dbl/pdptap/2000 MSS-AC.htm>
- F. Salfner, M. Malek: Predicting Failures of Computer Systems: A Case Study for a Telecommunication System, in: Proceedings of 11th IEEE Workshop on Dependable Parallel, Distributed and Network-Centric Systems (DPDNS' 06), Rhodes Island, Greece, April 2006 <http://ieeexplore.ieee.org/Xplore/login.jsp?url=/iel5/10917/34366/01639672.pdf?temp=x>
- W.T. Tsai, M. Malek, Y. Chen, F. Bastani: Perspectives on Service-Oriented Computing and Service-Oriented System Engineering, Symposium on Service Oriented System Engineering (SOSE 2006), October 2006 http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=4027111&isnumber=4027102
- V. Stantchev, M. Malek: Architectural Translucency in Service-oriented Architectures, in: [IEE Proceedings Software](#) 153(1):31-37, February 2006
- P. Ibach, N. Milanovic, J. Richling, V. Stantchev, A. Wiesner, M. Malek CERO: CE Robots Community, IEE Proceedings Software, Special Issue on Embedded Systems, Juni 2005, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1512735
- N. Milanovic, M. Malek: Architectural Support for Automatic Service Composition, Proceedings of the IEEE International Conference on Services Computing (SCC 2005), Orlando, Florida, USA, 2005, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1524433
- F. Salfner, M. Malek: Proactive Fault Handling for System Availability Enhancement, Proceedings of 10th IEEE Workshop on Dependable Parallel, Distributed and NetworkCentric Systems (DPDNS '05), Denver, April 2005, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=1420243
- B. Milic, N. Milanovic, M. Malek: Prediction of Partitioning in Location-aware Mobile Ad Hoc Networks Proceedings of the Thirty-eighth Annual Hawaii International Conference on System Sciences (HICSS-38), Minitrack on Quality of Service in Mobile and Wireless Networks, Hawaii, USA, January 2005, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=1385873&isnumber=30166
- N. Milanovic, M. Malek : Current Solutions for Web Service Composition, IEEE Internet Computing 8 (6): 51-59, December 2004, <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=1355922>
- N. Milanovic, M. Malek: Extracting Functional and Non-functional Contracts From Java Classes and Enterprise Java Beans, Proceedings of the Workshop on Architecting Dependable Systems (WADS 2004) at the International Conference on Dependable Systems and Networks (DSN 2004), Florence, Italy, 2004, <http://www.cs.kent.ac.uk/events/conf/2004/wads/DSN-WADS2004/Papers/milanovic.pdf>

- M. Malek, F. Salfner, G. Hoffmann: Self-Rejuvenation - an Effective Way to High Availability, SELF-STAR: International Workshop on Self-* Properties in Complex Information Systems, Bertinoro, Italy, Juni 2004 [Self-Rejuvenation an Effective Way to High Availability](#)
- N. Milanovic, J. Richling, M. Malek: Lightweight Services for Embedded Systems, Proceedings of 2nd IEEE Workshop on Software Technologies for Embedded and Ubiquitous Computing Systems, Vienna, Austria, May 2004, <http://doi.ieeecomputersociety.org/10.1109/WSTFEUS.2004.10026>
- M. Malek: Introduction to NOMADS, Computing Frontiers 2004, Ischia, Italy, April 2004, <http://portal.acm.org/citation.cfm?id=977097>
- F. Salfner, S. Tschirpke, and M. Malek: Comprehensive Logfiles for Autonomic Systems, Proceedings of 9th IEEE Workshop on Fault-Tolerant Parallel, Distributed and NetworkCentric Systems, Santa Fe, New Mexico, USA, April 2004, <http://doi.ieeecomputersociety.org/10.1109/IPDPS.2004.1303243>
- N. Milanovic, M. Malek, A. Davidson, V. Milutinovic: Routing and Security in Mobile Ad Hoc Networks, IEEE Computer, February 2004, <http://doi.ieeecomputersociety.org/10.1109/MC.2004.1266297>
- M. Malek: Towards Dependable Networks of Mobile Arbitrary Devices – Diagnosis and Scalability. Future Directions in Distributed Computing, Vol. 2548, Lecture Notes in Computer Science, A. Schiper, A. Shvartsman, H. Weatherspoon and B.Y. Zhao, Eds., pp. 191-196, Springer 2003, <http://www.springerlink.com/content/pbq3d852uvgddj3h/>
- N. Milanovic, V. Stantchev, J. Richling, M. Malek: Towards Adaptive and Composable Services, Proceedings of IPSI 2003, Sveti Stefan, Montenegro, 2003, <http://www2.informatik.hu-berlin.de/~milanovi/services.pdf>
- M. Malek: CobWeb: Challenge of Billions in the Web, Proceedings of Future Directions in Distributed Computing, Bertinoro, Italy, June 3-7, 2002, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=1551123&isnumber=33051
- A. Polze, J. Richling, J. Schwarz, M. Malek: Towards Predictable CORBA-based Services, Special Issue of International Journal of Computer Systems Science & Engineering, CRL Publishing, London, UK, 2001
- A. Polze, J. Schwarz, M. Malek: [Automatic Generation of Fault-Tolerant CORBA - Services](#), Proceedings of Technology of Object-Oriented Languages and Systems (TOOLS) USA, Santa Barbara, IEEE Computer Society Press, 2000
- A. Polze, M. Malek: [Responsive Services with CORBA](#), Special Issue on Object-Oriented Real-Time Distributed Systems of International Journal of Computer Systems Science & Engineering, Vol. 14, No. 4, pp.: 209-216, CRL Publishing, London, UK, 1999
- A. Polze, K. Wallnau, D. Plakosh, M. Malek: [Real-Time Computing with Off-the-Shelf Components: The Case for CORBA](#), in: Special Issue on Parallel and Distributed RealTime Systems of "Parallel and Distributed Computing Practices", Vol. 2, No. 1, 1999

- A. Polze, J. Richling, J. Schwarz, M. Malek: [Towards Predictable CORBA-based Web Services](http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=776375&isnumber=16866), in: Proceedings of 2th IEEE International Symposium on Object-oriented RealTime distributed Computing, pp.: 182-191, ISBN 0-7695-0207-5, St. Malo, France, May 2-5, 1999, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=776375&isnumber=16866
- M. Pandya, M. Malek: Minimum Achievable Utilization for Fault-Tolerant Processing of Periodic Tasks, in: IEEE Transactions on Computers, Vol. 47, No.10, 1998, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=729793&isnumber=15732
- A. Polze, M. Malek: Responsive Computing with CORBA, in: Proceedings of 1st IEEE International Symposium on Object-oriented Real-Time distributed Computing, pp.: 73-79, ISBN 0-8186-8430-5, Kyoto, Japan, April 1998, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=666770
- Polze, M. Malek: [Network Computing with SONiC](#), in: Journal on System Architecture (the Euromicro Journal), Special Issue on Cluster Computing, pp. 169-187, Elsevier Science V., The Netherlands, 1998
- M. Malek, A. Polze, M. Werner: [The Unstoppable Orchestra - a Responsive Distribute Application](#), in: Proceedings of the Third International Conference on Configurable Distributed Systems, Annapolis, USA, IEEE Computer Society Press, pp. 154-160(7), ISBN 0-8186-7395-8, May 1996
- M. Malek: Fault Diagnosis Techniques, in: Proceedings of Workshop on Dependable Computing, Gliwice May 1996
- M. Malek, A. Polze, M. Werner: [A Framework for Responsive Parallel Computing in Network-based Systems](#), in: Proceedings of International Workshop on Advanced Parallel Processing Technologies, Beijing, China, pp. 335-343, September 1995
- M. Malek, A. Polze: [Parallel Computing in a World of Workstations](#), in: Proceedings of Seventh IASTED/ISMM International Conference on Parallel and Distributed Computing and Systems, October 19-21 1995, Washington, D.C., USA, 1995
- M. Malek: Omniscience, Consensus, Autonomy: Three Tempting Roads to Responsiveness, in: Proceedings of The 14th Symposium on Reliable Distributed Systems, Keynote Address, Bad Neuenahr, September 1995
- S. Rangarajan, D. Fussell, M. Malek: Pipelined Diagnosis of Wafer-Scale Linear Arrays, in: Journal of Parallel and Distributed Computing, Vol. 20, 212-223, February 1994
- M. Malek: A Consensus-Based Model for Responsive Computing, IEICE Transactions on Information and Systems, in: Special Issue on Responsive Computer Systems, Vol. E76-D, No. 11, 1319-1324, November 1993
- L. Laranjeira, M. Malek, R. M. Jenevein, Jr.: Nest: A Nested-Predicate Scheme for Fault Tolerance, IEEE Transactions on Computers, Vol. 42, No. 11, 1303-1324, November 1993

- R. M. Jenevein, Jr., L. Laranjeira, M. Malek: Space/Time Overhead Analysis and Experiments with Techniques for Fault Tolerance, Dependable Computing and Fault-Tolerant Systems, C. E. Landwehr, et al. (eds.), Vol. 8, No. 3, 303-318, Springer-Verlag, 1993 (presented at the 3rd IFIP International Working Conference on Dependable Computing for Critical Applications, Mondello, Sicily, Italy, September 14-16, 1992)
- F. Harary, M. Malek: Variations on a Hypercube: Embellishments of Parallel Architectures, Mathematical and Computer Modeling, Pergamon Press, Vol. 17, No. 11, 105-111, 1993
- F. Harary, M. Malek: Quantifying Fault Recovery, in: Multiprocessor Systems, Mathematical and Computer Modeling, Pergamon Press, Vol. 17, No. 11, 97-104, 1993
- M. Barborak, M. Malek, A. Dahbura: The Consensus Problem in Fault-Tolerant Computing, ACM Computing Surveys, Vol. 25, No. 2, 171-220, June 1993
<http://doi.acm.org/10.1145/152610.152612>
- M. Barborak, M. Malek: Partitioning for Efficient Consensus, in: Proceedings of the 26th Hawaii International Conference on System Sciences, Vol. 2, 438-446, Maui, January 5-8, 1993
- A. M. Johnson, R. M. Jenevein, Jr., M. Malek, B. L. Menezes, K. H. Yau: Fault Impact and Fault Tolerance in Multiprocessor Interconnection Networks, Quality and Reliability Engineering International, Vol. 8, 485-500, 1992
- Y. Kakuda, T. Kikuno, M. Malek, H. Saito: A Unified Approach to Design of Responsive Protocols, Proceedings of the 1992 IEEE Workshop on Fault-Tolerant Parallel and Distributed Systems, 8-11, Amherst, MA, July 6-7, 1992
- D. Fussell, M. Malek, S. Rangarajan: Efficient Fault Diagnosis of Switches in Wafer Arrays, in: Proceedings of the 1992 International Conference on Wafer Scale Integration, 341-351, San Francisco, CA, January 22-24, 1992
- Y. Kakuda, T. Kikuno, M. Malek, H. Saito: Efficient Checkpointing for Protocol Recovery in Communication Systems, Proceedings of the 1991 International Symposium on Communications, 704-707, Tainan, Taiwan, ROC, December 9-13, 1991
- L. Laranjeira, M. Malek, R. M. Jenevein, Jr.: On Tolerating Faults in Naturally Redundant Algorithms, in: Proceedings of the Tenth Symposium on Reliable Distributed Systems, 118-127, Pisa, Italy, September 30 - October 2, 1991
- V. Karamcheti, M. Malek: A TSP Engine for Performing Tabu Search, in: Proceedings of the 1991 International Conference on Application-Specific Array Processors, 309-321, Platja d'Aro, Spain, September 2-4, 1991
- A. Mourad, B. Oezden, M. Malek: Comprehensive Testing of Multistage Interconnection Networks, IEEE Transactions on Computers, 935-951, August 1991
- M. Malek, B. Oezden: Optimized Testing of Meshes, in: Proceedings of the 1990 International Test Conference, 627-637, Washington, DC, September 1990

- S. Rangarajan, D. Fussell, M. Malek: Built-In Testing of Integrated Circuit Wafers, IEEE Transactions on Computers, C-39 (2), 195-205, February 1990
- M. Malek, M. Guruswamy, M. Pandya, H. Owens: Serial and Parallel Simulated Annealing and Tabu Search Algorithms for the Traveling Salesman Problem, Annals of Operations Research, 21, 59-84, 1989
- D. Fussell, M. Malek, S. Rangarajan: Fault Diagnosis of Linear Processor Arrays, Defect and Fault Tolerance in VLSI Systems, I. Koren (ed.), Chapter 6, 149-160, Plenum Press, New York, 1989
- M. Malek, A. Mourad, M. Pandya: Topological Testing, Proceedings of the 1989 International Test Conference, 103-110, Washington, DC, August 1989
- M. Malek, E. Opper: The Cylindrical Banyan Multicomputer: A Reconfigurable Systolic Architecture, Journal of Parallel Computing, 10, 319-327, 1989
- V. Cherkassky, M. Malek: A Measure of Graceful Degradation in Parallel-Computer Systems, IEEE Transactions on Reliability, 38 (1), 76-81, April 1989
- I. Gazit, M. Malek: On the Number of Permutations Performable by Extra-Stage Multistage Networks, IEEE Transactions on Computers, C-38 (2), 297-302, February 1989
- V. Cherkassky, M. Malek: Partitioning and Permuting Properties of CC-Banyan Networks, IEEE Transactions on Computers, C-38 (2), 274-278, February 1989
- E. E. Swartzlander, Jr., M. Malek: Overlapped Subarray Testing for Wafer Scale Integration, Proceedings of the International Conference on Wafer Scale Integration, 335-343, San Francisco, CA, January 1989
- A. M. Johnson, M. Malek: Survey of Software Tools for Evaluating Reliability, Availability, and Serviceability, ACM Computing Surveys, 20 (4), 227-269, December 1988; translated and reprinted in Japanese, Kyoritsu Shuppan Co., Ltd., publisher, 1990
- X. Li, M. Malek: Analysis of Speedup and Communication/Computation Ratio in Multiprocessor Systems, Proceedings of the Real-Time Systems Symposium, 282-288, Huntsville, AL, December 1988
- M. Malek, K. H. Yau: The Resiliency Triple in Multiprocessor Systems, Proceedings of 1988 International Conference on Parallel Processing, 351-358, Chicago, IL, August 1988
- I. Gazit, M. Malek: Fault Tolerance Capabilities in Multistage Network-Based Multicomputer Systems, IEEE Transactions on Computers, C-37 (7), 788-798, July 1988
- Y-H. Choi, M. Malek: A Fault-Tolerant Systolic Sorter, IEEE Transactions on Computers, C37 (5), 621-624, May 1988
- Y-H. Choi, M. Malek: A Fault-Tolerant FFT Processor, IEEE Transactions on Computers, C37 (5), 617-621, May 1988

- L. Barnett, K. Abeynayake, M. Malek: LANCET: Local Area Network Comprehensive Evaluation Tool, Proceedings of the 1988 Computer Networking Symposium, 340-347, Washington, DC, April 1988
- K. H. Yau, M. Malek: Real-Time Correction by Intelligent Retry in Parallel Communication Networks, in: Proceedings of 8th Symposium on Real-Time Systems, San Jose, CA, December 1987
- K. H. Yau, M. Malek: Optimized Reconfiguration Scheme for Fault-tolerant Multistage Networks, in: Proceedings of 8th Symposium on Real-Time Systems, San Jose, CA, December 1987
- S. Han, M. Malek: A New Technique for Error Detection and Correction in Semiconductor Memories, in: Proceedings of International Test Conference, Washington, DC, September 1987
- I. Gazit, M. Malek: On the Number of Permutations Performable by Extra-Stage Multistage Interconnection Networks, Proceedings of 1987 International Conference on Parallel Processing, 461-470, Chicago, IL, August 1987
- V. Cherkassky, M. Malek: Graceful Degradation of Multiprocessor Systems, Proceedings of 1987 International Conference on Parallel Processing, 885-888, Chicago, IL, August 1987
- S. Lee, M. Malek, H. Shin: Concurrent Garbage Collection with Associative Tag, Proceedings of International Conference on Computers and Applications, Beijing, China, June 1987
- A. M. Malek, M. Johnson, B. D. Rathi: Comparison of Concurrent Error-Correcting Techniques for Multistage Interconnection Networks, Proceedings of International Conference on Computers and Applications, Beijing, China, June 1987
- K. H. Yau, M. Malek: Cost-Effective Error Detection Codes in Multicomputer Networks, Euromicro Journal (Special Issue on Fault-Tolerant Computing), Vol. 20, Nos. 4 & 5, 331-343, May 1987
- B. D. Rathi, M. Malek, D. A. George, A. M. Johnson: Effective Concurrent Recovery Mechanisms for Soft Errors in MINs, Proceedings of Hawaii International Conference on System Sciences, Kailua-Kona, HI, January 1987
- Y.-H. Choi, D. S. Fussell, M. Malek: Fault Diagnosis of Switches in Wafer-Scale Arrays, in: Proceedings of International Conference on Computer-Aided Design, ICCAD-86, 292-295, Santa Clara, CA, November 1986
- S. H. Han, and M. Malek: Two-Dimensional Multiple-Access Testing Technique for Random-Access Memories, Proceedings of IEEE International Conference on Computer Design, 248-251, Port Chester, NY, October 1986
- P. Suhler, N. Bagherzadeh, M. Malek, and N. Iscoe: A Taxonomy of Software Authorization Systems, IEEE Software, 3 (5), 34-41, September 1986

- V. Cherkassky, and M. Malek: Analysis of CC-Banyan Networks, Proceedings of 1986 International Conference on Parallel Processing, 115-118, Chicago, IL, August 1986
- R. M. Jenevein, Jr., M. Malek, and B. L. Menezes: Reliability Analysis of the KYKLOS Interconnection Network, Proceedings of 6th International Conference on Distributed Computing Systems, 46-53, Cambridge, MA, May 1986
- M. Malek, and Y-H. Choi: Real-Time Diagnosis of Homogeneous Systems, Proceedings of the 1985 Real-Time Systems Symposium, 155-159, San Diego, CA, December 1985
- V. Cherkassky, and M. Malek: Reliability and Fail-Softness Analysis of Multistage Interconnection Networks, IEEE Transactions on Reliability, R-34 (5), 524-528, December 1985
- Y-H. Choi, and M. Malek: A Fault-Tolerant VLSI Sorter, Proceedings of IEEE International Conference on Computer Design, 510-513, Port Chester, NY, October 7-10, 1985
- H. Shin, and M. Malek: Parallel Garbage Collection with Associative Tag Computers, Proceedings of 1985 International Conference on Parallel Processing, 369-375, Chicago, IL, August 1985
- V. Cherkassky, and M. Malek: On Permuting Properties of Regular Rectangular SW-Banyans, IEEE Transactions on Computers, C-34 (6), 542-546, June 1985
- Y-H. Choi, and M. Malek: A Fault-Tolerant FFT Processor, Digest of Papers of the 15th Fault-Tolerant Computing Symposium, 266-271, June 1985
- V. Cherkassky, M. Malek, and G. J. Lipovski: Fail-Softness Analysis of Tree-Based Local Area Networks, Proceedings of 5th International Conference on Distributed Computing Systems, Denver, CO, May 1985
- H. Shin, and M. Malek: A Boolean Content Addressable Memory and Its Applications, Proceedings of IEEE, 1142-1144, April 1985
- S. Yalamanchili, M. Malek, and J. K. Aggarwal: Workstations in a Local Area Network Environment, COMPUTER, 74-86, November 1984
- Y-H. Choi, S. Han, and M. Malek: Fault Diagnosis of Reconfigurable Systolic Arrays, Proceedings of the IEEE International Conference on Computer Design, 451-455, Port Chester, NY, October 8-11, 1984
- D. B. Sarrazin, and M. Malek: Fault-Tolerant Semiconductor Memories, COMPUTER, 49-56, August 1984
- V. Cherkassky, E. Opper, and M. Malek: Reliability and Fault Diagnosis Analysis of FaultTolerant Multistage Interconnection Networks, Digest of Papers of the 14th International Conference on Fault-Tolerant Computing, 246-251, Kissimmee, FL, June 20-22, 1984

- H. Shin, A. J. Welch, and M. Malek: I/O Overlapped Sorting Schemes for VLSI, Proceedings of IEEE International Conference on Computer Design, 731-734, Port Chester, NY, October 31-November 3, 1983
- H. Shin, and M. Malek: Identification of Microprogrammable Loops for Problem Oriented Architecture Synthesis, Proceedings of the MICRO-16 (The 16th Annual Microprogramming Workshop), 122-127, Downingtown, PA, October 11-14, 1983
- W. Lee, and M. Malek: MOPAC: A Partitionable and Reconfigurable Multicomputer Array, Proceedings of 1983 International Conference on Parallel Processing, 506-510, Bellaire, MI, August 1983
- M. Malek, and E. Opper: Diagnosis of Multiple Faults in SW-Banyan Networks, Digest of Papers of the 13th Fault-Tolerant Computing Symposium, 446-449, Milan, Italy, June 1983
- E. Opper, M. Malek, and G. J. Lipovski: Resource Allocation in Rectangular CC-Banyans, Proceedings of the 10th International Symposium on Computer Architecture, 178-184, Stockholm, Sweden, June 1983
- G. J. Lipovski, A. Gajwani, S. Balachandran, and M. Malek: Implementation of a Small Lookahead Network, Proceedings of Hawaii International Conference on Systems Sciences, Honolulu, HI, January 1983
- M. Malek, and E. Opper: Real-Time Diagnosis of Banyan Networks, Proceedings of Real-Time Systems Symposium, 27-36, Los Angeles, CA, December 1982
- S. Cheemalavagu, and M. Malek: Analysis and Simulation of Packet Switching in Banyan Interconnection Networks with 2x2, 4x4 and 8x8 Switching, Proceedings of Real-Time Systems Symposium, 83-89, Los Angeles, CA, December 1982
- E. Opper, and M. Malek: Resource Allocation for a Class of Problem Structures in Multistage Interconnection Network-based Systems, Proceedings of the 3rd International Conference on Distributed Computing Systems, 106-113, Miami, FL, October 1982
- A. Goyal, G. J. Lipovski, and M. Malek: Reliability in Ring Networks, Proceedings of COMPCON Fall '82, 444-453, Washington, DC, September 1982
- M. Malek, and J. Maeng: Partitioning of Large Multicomputer Systems for Efficient Fault Diagnosis, Digest of Papers of the 12th Fault-Tolerant Computing Symposium, 341-348, Los Angeles, CA, June 1982
- G. J. Lipovski, M. Malek, and A. Goyal: Lookahead Networks, AFIPS Conference Proceedings, 51, 153-165, Houston, TX, June 1982
- A. Hung, and M. Malek: A 4x4 Modular Crossbar Design for the Multistage Interconnection Networks, Proceedings of Real-Time Symposium, 3-12, Miami Beach, FL, December 1981

- J. Maeng, and M. Malek: A Comparison Connection Assignment for Self-Diagnosis of Multiprocessor Systems, Digest of Papers of the 11th Fault-Tolerant Computing Symposium, 173-175, Portland, ME, June 1981
- J. C. Browne, D. DeGroot, and M. Malek: An Operating System Design Problem for a Reconfigurable Varistructurable Multicomputer System, Proceedings of COMPCON Spring '81, San Francisco, CA, February 1981
- M. Malek, and W. W. Myre: A Description Method of Interconnection Networks, Distributed Processing Quarterly, 1 (1), 1-6, February 1981
- D. DeGroot, and M. Malek: Resource Allocation for Macropipelines, Proceedings of the Distributed Data Acquisition, Computing and Control Symposium, 23-27, Miami, FL, December 1980
- M. Malek, and J. C. Browne: Scheduling Problems in Multistage Network Interconnected Computer Systems, Compsac Proceedings, 860-865, Chicago, IL, October 1980
- B. D. Rathi, and M. Malek: Fault Diagnosis of Interconnection Networks, Proceedings of Distributed Data Acquisition, Computing and Control Symposium, 110-119, Miami, FL, December 1980
- U. V. Premkumar, R. Kapur, M. Malek, G. J. Lipovski: Design and Implementation of the Banyan Interconnection Network in TRAC, National Computer Conference Proceedings, 643-654, Anaheim, CA, May 1980
- M. Malek: A Comparison Connection Assignment for Diagnosis of Multiprocessor Systems, Proceedings of the 7th International Symposium on Computer Architecture, 31-36, La Baule, France, May 1980
- M. Malek, and W. W. Myre: Figures of Merit for Interconnection Networks, Proceedings of Workshop on Interconnection Networks, 74-83, April 1980
- M. Malek, and K. Y. Liu: Graph Theory Models in Fault Diagnosis and Fault Tolerance, Journal of Design Automation and Fault-Tolerant Computing, Vol. III, Issue 3/4, 1979
- M. Malek, and J. W. Smith: Self-Diagnosable Model for a Distributed Computer System, Proceedings of Hawaii International Conference on Systems Sciences-12, 11-17, Honolulu, HI, January 1979
- Y. D. Fan, and M. Malek: On Improving the System Diagnosability, Proceedings of Fault-Tolerant and Diagnostics Conference, FTDC '78, 70-84, Gdansk, Poland, September 1978
- J. Gruber, and M. Malek: Fault Diagnosis Oriented Statistical Analysis of Fault Transfers in Computer Systems, Proceedings of the International Symposium on Fault Diagnosis, Prague, Czechoslovakia, August 1977
- M. Malek: Diagnosability Degree of Test Sets, Proceedings of International Symposium on Fault Diagnosis and Fault-Tolerant Computing, Wisla, Poland, 1976

- M. Malek: Effectiveness Criterion of Fault Diagnosis for Systems Designing, *Informatyka*, 11, 19-22, 1976
- M. Malek: Diagnosability Degree of Systems, *Scientific Papers of the Institute of Technical Cybernetics*, 27, 5-15, 1975
- M. Malek: Criteria of Classification of Diagnosis Techniques in Computer Systems, *Scientific Papers of the Institute of Technical Cybernetics*, 22, 15-27, 1975
- M. Malek: An Attempt to Estimate Fault Diagnosis Effectiveness, *Proceedings of VIth National Conference on Automatics*, Poznan, Poland, 1974

IBM disclosures and reports

Author and coauthor of over 30 additional Technical Reports for various companies and government institutions.

- A. M. Johnson, and M. Malek: Rainbow Nets for System Analysis, IBM Technical Report TR 51.0565, September 1989, IBM Systems Technology Division, Austin, Texas
- A. M. Johnson, and M. Malek: Fault Classification: The First Step in Fault-Tolerant Design, IBM Technical Report TR 51.0493, January 1989, IBM Systems Technology Division, Austin, Texas
- R. M. Jenevein, Jr., A. M. Johnson, M. Malek, B. L. Menezes, and K. H. Yau: Options for Achieving Fault Tolerance in Multiprocessor Interconnection Networks, IBM Technical Report TR 51.0432, May 1988, IBM Systems Technology Division, Austin, Texas
- A. M. Johnson, and M. Malek: Survey of Software Tools for Evaluating Reliability, Availability, and Serviceability, IBM Technical Report TR 51.0407, December 1987, IBM Systems Technology Division, Austin, Texas
- M. Malek, S. Cheemalavagu, I. Gazit, and B. D. Rathi: Fault Impact on Multistage Interconnection Network Performance, IBM Technical Report RC 11617 (#51900) 12/4/85, IBM T.J. Watson Research Center, Yorktown Heights, New York
- B. D. Rathi, M. Malek, D. A. George, and A. M. Johnson: Effective Concurrent Recovery Mechanisms for Soft Errors in MINs, IBM Technical Report RC 11614 (#51727) 11/19/85, IBM T.J. Watson Research Center, Yorktown Heights, New York
- K. Yau, B. D. Rathi, M. Malek, and D. A. George: Error Detection for Control Lines in MultiComputer Networks, IBM Technical Report RC 12555 (#56459), 3/5/87, IBM T.J. Watson Research Center, Yorktown Heights, New York
- M. Malek, and B. D. Rathi: Recovery Mechanisms for Fetch & Op Instruction Execution Errors, *IBM Technical Disclosure Bulletin*, Vol. 29, No. 10, March 1987, pp. 4495-4500

Non-refereed publications

- M. Malek, G. A. Hoffmann, N. Milanovic, St. Brüning, R. Meyer, B. Milic: Methoden und Werkzeuge zur Verfügbarkeitsermittlung, Research Report No. 219, Institute of Computer Science, Humboldt-University Berlin, 2007
<http://www2.informatik.huberlin.de/sam/preprint/milic219.pdf>
- Stefan Brüning, Stephan Weißleder, Mirosław Malek : A Fault Taxonomy for Service-Oriented Architecture in: Informatik-Berichte der HU Berlin, Tech. Rep. 215, 2007
<http://www2.informatik.hu-berlin.de/sam/preprint/weissled215.pdf>
- F. Salfner, M. Malek : Reliability Modeling of Proactive Fault Handling, Research Report No. 209, Department of Computer Science, Humboldt-University Berlin, 2006,
<http://www2.informatik.hu-berlin.de/sam/preprint/salfner209.pdf>
- Mirosław Malek, Peter Ibach: Universitäten als Kristallisationskern in Innovationsnetzwerken, Wissenstransfer auf den Spuren von Humboldt und Schumpeter, Humboldt-Spektrum, February 2004 F. Salfner, M. Malek: Early Fault Detection and Failure Prediction in Large Software Systems, IBM Academy Conference on Proactive Problem Prediction, Avoidance and Diagnosis, Yorktown Heights, USA, April 2003
- M. Malek: The NOMADS Republic, Proceedings of International Conferences on Advances in Infrastructure for Electronic Business, Education, Science, Medicine and Mobile Technologies on the Internet, Scuola Superiore G. Reiss Romoli (SSGRR), Telecom Italia, L'Aquila, Italy, 2003
- M. Malek: Hybrid Methods and Systems: Modus Vivendi for the New Millennium, Proceedings of 9th European Workshop on Dependable Computing, Keynote Address, May 14-16, Gdansk, Poland, 1998
- M. Werner, M. Malek: The Unstoppables - Responsiveness by Consensus, HUB Informatik-Berichte No. 90/97, ISSN: 0863-95 90, Berlin, December 1997
- M. Malek, A. Polze, M. Werner: A Framework for Responsive Parallel Computing in Network-Based Systems, HUB Informatik-Berichte No. 51/95, ISSN: 0863-095, Berlin, December 1995
- M. Werner, A. Polze, M. Malek: The Unstoppable Orchestra - A Responsive Distributed Application, HUB Informatik-Berichte No. 53/95, ISSN: 0863-95 53, Berlin, December 1995
- A. Polze, M. Malek: [The Shared Objects Net-interconnected Computer \(SONiC\)](#), HUB Informatik-Berichte No. 52/95, ISSN: 0863-95 52, Berlin, December 1995
- M. Yoon, M. Malek: Configurable Shared Virtual Memory for Parallel Computing, Department of Computer Sciences Technical Report #TR-94-21, The University of Texas at Austin, July 1994
- M. Malek: Next Step: Responsive Multicomputer Systems, Real Time Computing, W. A. Halang and A. D. Stoyenko (eds.), NATO ASI Series F, Computer and Systems Sciences, Vol. 127, 656-657, Springer-Verlag, 1994 (presented at the NATO Advanced Study Institute on Real Time Computing, Sint Maarten, Dutch Antilles, October 5-17, 1992)

- M. Malek: A Consensus-Based Framework for Responsive Computer System Design, Real Time Computing, W. A. Halang and A. D. Stoyenko (eds.), NATO ASI Series F, Computer and Systems Sciences, Vol. 127, 309-324, Springer-Verlag, 1994 (presented at the NATO Advanced Study Institute on Real Time Computing, Sint Maarten, Dutch Antilles, October 5-17, 1992)
- M. Malek, A. A. Moin: A Hybrid Technique for Deterministic Algorithms with a Shortest Path Example, Department of Computer Sciences Technical Report #TR-94-15, The University of Texas at Austin, April 1994
- M. Pandya, M. Malek: Minimum Achievable Utilization for Fault-Tolerant Processing of Periodic Tasks, Department of Computer Sciences Technical Report #TR-94-07, The University of Texas at Austin, March 1994
- E. E. Swartzlander, Jr., M. Malek: Overlapped Subarray Segmentation: an Efficient Test Method for Cellular Arrays, VLSI Design and WSI Arrays, Special Issue on VLSI Testing, Vol. 1, No. 1, 1-7, 1993
- M. Malek: High-Performance Computing in Europe, European Science Notes Information Bulletin, ESNIB 92-08, 471-517, 1992
- M. Barborak, M. Malek: UNICON - A UNiversal CONSensus for Responsive Computer Systems, Department of Computer Sciences Technical Report
- L. Laranjeira, M. Malek, R. M. Jenevein, Jr.: Experimental Evaluation of Techniques for Fault Tolerance, Department of Computer Sciences Technical Report #TR-92-32, The University of Texas at Austin, July 1992
- M. Barborak, A. Dahbura, M. Malek: The Consensus Problem in Fault-Tolerant Computing, Department of Computer Sciences Technical Report #TR-91-40, The University of Texas at Austin, December 1991
- M. Malek: Responsive Systems: A Marriage Between Real Time and Fault Tolerance, Keynote Address, Proceedings of the Fifth International Conference on Fault-Tolerant Computing Systems, Nuernberg, Germany, Springer-Verlag, Informatik-Fachberichte 283, 1-17, September 25, 1991
- M. Malek: Starlight - High Performance, Low Cost, Small Package, European Science Notes Information Bulletin, ESNIB 91-04, 65-67, 1991
- M. Malek: Closing a Gap between Parallel Computing and Physical Sciences, European Science Notes Information Bulletin, ESNIB 91-03, 10-13, 1991 M. Malek: Transputer Applications '90, European Science Notes Information Bulletin, ESNIB 91-01, 39-43, 1991
- M. Malek: Fault-Tolerant Computing in Europe - An Update, European Science Notes Information Bulletin, ESNIB 91-01, 36-39, 1991
- M. Malek: Responsive Systems - A Challenge for the Nineties, Keynote Address, Proceedings of Euromicro '90, Sixteenth Symposium on Microprocessing and Microprogramming,

Amsterdam, The Netherlands, North Holland, Microprocessing and Microprogramming 30, 9-16, August 29, 1990

- M. Guruswamy, M. Malek, H. Owens, M. Pandya: A Hybrid Algorithm Technique, Department of Computer Sciences Technical Report #TR-89-6, The University of Texas at Austin, March 1989; translated and reprinted in Japanese in the book entitled Genetic Algorithm and its Applications, Kido, Takashi, (Hiroaki Kitano, ed.), Sangyo Tosho Publishing Co., Ltd., May 1983
- J. Maeng, M. Malek: A Comparison Method for Self-Diagnosis of Multiprocessor Systems, Department of Electrical Engineering Technical Report, The University of Texas at Austin, March 1981