

CURRICULUM VITAE

Ali Movaghar

ADDRESS

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RESEARCH INTERESTS

- Performance and dependability modeling
- Formal Verification
- Wireless and Mobile Networks
- Distributed real-time systems.
- Internet of Things
- Cyber-physical Systems

EDUCATION

- *Ph.D.*
 - Computer, Information, and Control Engineering, The University of Michigan, Ann Arbor, MI, August 1985

Title of thesis:
Performability modeling with stochastic activity networks.
- *M.S.*
 - Computer, Information, and Control Engineering, The University of Michigan, Ann Arbor, MI, April 1979.
- *B.S.*
 - Electrical Engineering, Tehran University, Tehran, Iran, August 1977.

ACADEMIC EXPERIENCE

- Professor, Department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, February 2007 - present
- Associate Professor, Department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, March 2000 - February 2007
- Assistant Professor, Department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, February 1994 - March 2000
- Lecturer, Department of Electrical Engineering and Computer Science, The University of Michigan, Ann Arbor, MI, September 1987 - September 1988.

ADMINISTRATIVE EXPERIENCE

- Dean of International Affairs, Sharif University of Technology, Tehran, Iran, October 2015-November 2017.
- Chair, Information Technology Group at the department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, May 2015-November 2015.
- Chair, Software Group at the department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, October 2012 - October 2014.
- On Sabbatical Leave in the Department of Electrical Engineering and Computer Science, University of California, Irvine, USA, January 2011-August 2011.
- Chair, Information Technology Group at the department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, 2009-2011.
- Dean of Graduate Studies, School of Science and Engineering, International Campus of Sharif University of Technology at Kish Island, Persian Gulf, Iran, 2007-2008.
- Chair, Graduate Committee at the department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, 1994-1996, 2002-2006.
- Chair, Software Group at the department of Computer Science and Engineering, Sharif University of Technology, Tehran, Iran, 1998-2000, 2003-2004.

COURSES TAUGHT

- *Graduate:*
 - Wireless Networking
 - Verification of Reactive Systems
 - Complexity Theory
 - Modeling and Analysis of Computer Networks
 - Computer Systems Performance Evaluation
 - Formal Methods for Reactive Systems
 - Advanced Topics on Software Systems
 - Advanced Computer Networks
 - Neural Networks
 - Fuzzy Systems
 - Theory of Finite Automata
- *Undergraduate:*
 - Discrete Structures
 - Computer Networks
 - Theory of Machines and Languages
 - Computer Simulation
 - Data Structures and Algorithms
 - Switching and Sequential Systems
 - Assembly Language Programming
 - Programming and Computer Systems.

PROFESSIONAL ACTIVITIES

- Program Committee Member, 9th IPM International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN 21), Tehran, Iran, May 2021.
- Program Committee Member, 8th IPM International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN 19), Tehran, Iran, May 2019.
- Program Committee Chair, 24th Annual National CSI Computer Conference, Sharif University of Technology, Tehran, Iran, February 13 - February 14, 2019.
- General Chair, The CSI Symposium on Real-Time and Embedded Systems and Technologies (RTEST), University of Tehran, Tehran, Iran, May 9-10, 2018.

- Program Committee Chair, 23rd Annual National CSI Computer Conference, Sharif University of Technology, Tehran, Iran, February 28 - March 1, 2018.
- General Chair, The CSI Symposium on Real-Time and Embedded Systems and Technologies (RTEST), Sharif University of Technology, Tehran, Iran, October 7-8, 2015.
- Program Committee Chair, Computer Area, The 23rd Iranian Conference on Electrical Engineering, Sharif University of Technology, May 10-14, 2015, Tehran, Iran.
- General Chair, The 2013th CSI International Symposium on Computer Science and Software Engineering (CSSE 2013), Sharif University of Technology, Tehran, Iran, December 25-27, 2013.
- General Chair, The 2013th CSI International Symposium on Artificial Intelligence and Signal Processing (AISP 2013), Sharif University of Technology, Tehran, Iran, December 25-27, 2013.
- General Chair, The 2013th CSI International Symposium on Computer Networks and Distributed Systems (CNDS 2013), Sharif University of Technology, Tehran, Iran, December 25-27, 2013.
- Program Committee Member, Third International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN '13), Tehran, Iran, April 2013.
- Program Committee Member, 3rd IPM-NUS Workshop on Computer Science, Tehran, Iran, March 2013.
- Program Committee Member, The 2012th CSI International Symposium on Computer Architecture & Digital Systems (CADS 2012), Shiraz, Iran, May 2-3, 2012.
- Program Committee Chair, 17th Annual CSI Computer Conference, Tehran, Iran, March 7-9, 2012.
- Program Committee Member, Third International Symposium on Fundamentals of Software Engineering: Theory and Practice (FSEN '11), Tehran, Iran, April 2011.
- Program Committee Member, Third International Symposium on Fundamentals of Software Engineering: Theory and Practice (FSEN '09), Kish Island, Persian Gulf, Iran, April 2009.
- International Program Committee Member, The 19th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2007), Cambridge, Massachusetts, USA, November 19 - 21, 2007.

- General Chair, Second International Symposium on Fundamentals of Software Engineering: Theory and Practice (FSEN '07), Tehran, Iran, February 2007.
- Track Chair for Performance Evaluation, 12th International CSI Computer Conference, Tehran, Iran, January 2007.
- International Program Committee Member, The 18th IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS 2006), Dallas, TX, USA, November 2006.
- Track Chair for Software Engineering and Formal Methods, 11th International CSI Computer Conference, IPM School of Computer Science, Tehran, Iran, January 2006.
- General Chair, IPM International Workshop on Foundations of Software Engineering: Theory and Practice (FSEN 2005), Tehran, Iran, October 2005.
- International Program Committee Member, IASTED International Conference on Parallel and Distributed Computing and Systems, Phoenix, AZ, USA, November 2005.
- Program Committee Member, 10th Annual Int. CSI Computer Conference, Tehran, Iran, February 2005.
- International Program Committee Member, IASTED International Conference on Parallel and Distributed Computing and Systems, Cambridge, MA, USA, November 2004.
- Program Committee Chair, 9th Annual Int. CSI Computer Conference, Tehran, Iran, February 2004.
- Program Committee Member, 7th Annual Int. CSI Computer Conference, Tehran, Iran, March 2002.

PROFESSIONAL SOCIETIES

- Senior Member of the Institute of Electrical and Electronics Engineers (IEEE),
- Senior Member of the Association for Computing Machinery (ACM).
- Member of the Iranian Academy of Sciences.

NON-ACADEMIC EXPERIENCE

- Member of Technical Staff, AT&T Information Systems, Naperville, IL, 1985-1986

- Associate Researcher, Communications and Networks Laboratory (CNL), Industrial Technology Institute (ITI), Ann Arbor, MI, 1984-1985
- Associate Researcher, Institut National de Recherche en Informatique et en Automatique (INRIA), Paris, France, 1983-1984.

TECHNICAL REPORTS

- “Extending Rebeca with Synchronous Message and Reusable Components,” (with M. Sirjani, F.S. de Boer and A. Shali), Report SEN-R0505, CWI, Amsterdam, Netherlands, February 2005.
- “Real-time local area networks: some design and modeling issues,” (with G. Le Lann, J. F. Meyer, and S. Sedillot), INRIA Research Report No. 448, Institut National de Recherche en Informatique et en Automatique, Paris, France, October 1985.
- “Performability modeling with stochastic activity networks,” Technical Report CRL-TR-8-85, The University of Michigan, Ann Arbor, MI, August 1985.
- “Stochastic activity networks: structure, behavior, and applications,” (with J. F. Meyer and W. H. Sanders), ITI Technical Report 84-7, Industrial Technology Institute, Ann Arbor, MI, December 1984.
- “Performability modeling with stochastic activity networks,” (with J. F. Meyer), ITI Technical Report 84-6, Industrial Technology Institute, Ann Arbor, MI, September 1984.

JOURNAL/ELECTRONIC NOTES PAPERS

1. S. Aalibagi, H. Mahyar, A. Movaghar and H.E. Stanley, A Matrix Factorization Model for Hellinger-based Trust Management in Social Internet of Things, to appear in the *IEEE Transactions on Dependable and Secure Computing*.
2. M. Golkarifard, A. Movaghar, Dynamic VNF Placement, Resource Allocation and Traffic Routing in 5G, to appear in the *Computer Networks*.
3. S. Rezaei, M. Gharib, R. Entezari-Maleki, K. Trivedi and A. Movaghar, Modeling and Evaluation of Multi-hop Wireless Networks using SRNs, to appear in the *IEEE Transactions on Network Science and Engineering*.
4. E. Ataie, R. Entezari-Maleki and A. Movaghar, Availability Modeling in Redundant OpenStack Private Clouds, to appear in the *Software: Practice and Experience*.

5. S. Rezaei, M. Gharib and A. Movaghar, Throughput Analysis of IEEE 802.11 Multi-hop Wireless Networks with Routing Consideration: A General Framework, to appear in the *IEEE Transactions on Communications*.
6. A. Ghandomi, A. Movaghar, M. Reshadi and A. Khademzadeh, Designing a MapReduce Performance Model in Distributed Heterogeneous Platforms Based on Benchmarking Approach, to appear in *The Journal of Supercomputing*.
7. S. Rezaei, M. Gharib and A. Movaghar, Throughput Analysis of IEEE 802.11 Multi-hop Wireless Networks with Routing Consideration: A General Framework, to appear in the *IEEE Transactions on Communications*.
8. S. Fakhrolmobasheri, E. Ataie and A. Movaghar, Modeling and Evaluation of Power-Aware Software Rejuvenation in Cloud Systems, to appear in the *Algorithms*.
9. M. Askarnejad, M. Malekimajd and A. Movaghar, Network and Application-Aware Cloud Service Selection in Peer-Assisted Environments, to appear in the *IEEE Transactions on Cloud Computing*.
10. M. Malekimajd and A. Movaghar, Minimizing data access latencies for virtual machine assignment in cloud systems, *IEEE Transactions on Service Computing*, Vol.13, No.5, October 2020.
11. A. Amini Motlagh, A. Movaghar and A.M. Rahmani, Task Scheduling Mechanisms in Cloud Computing: A Systematic Review, *International Journal of Communication Systems*, Vol. 33, No. 6, April 2020.
12. R. Entezari-Maleki, S.E. Etesami, N. Ghorbani, A.A. Niaki, L. Sousa, and A. Movaghar, Modeling and Evaluation of Service Composition in Commercial Multi-Clouds using Timed Colored Petri Nets, *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, Vol. 53, No. 3, pp. 947-961, 2020.
13. M. Ahmadi, J. Roberts, E. Leonardi and A. Movaghar, Cache Subsidies for an Optimal Memory for Bandwidth Tradeoff in the Access Network, *IEEE Journal on Selected Areas in Communications*, Vol. 38, No. 4, pp. 736-740, 2020.
14. M. Ahmadi, J. Roberts, E. Leonardi and A. Movaghar, On the effectiveness of the PIT in reducing upstream demand in an NDN router, *Performance Evaluation*, Vol. 138, Article 102081, April 2020.
15. M. Ahmadnia, A. Movaghar and A.M. Rahmani, Ontology-Based Modelling and Information Extracting of Physical entities in Semantic Sensor Networks, *IETE Journal of Research*, Vol. 65, No. 4, 2019.

16. M. Gharib, H. Yousefzadeh and A. Movaghar, A Secure Overlay Routing for Large Scale Networks, *IEEE Transactions on Network Science and Engineering*, Vol. 6, No. 3, pp. 501-511, 2019.
17. E. Ataie, R. Entezari-Maleki, L. Rashidi, K. S. Trivedi, D. Ardagna, and A. Movaghar, Hierarchical Stochastic Models for Performance, Availability, and Power Consumption Analysis of IaaS Clouds, *IEEE Transactions on Cloud Computing*, Vol.7, No.4, pp. 1039-1056, 2019.
18. L. Rashidi, R. Entezari-Maleki, D. Chatzopoulos, P. Hui, K.S. Trivedi and A. Movaghar, Performance Evaluation of Epidemic Content Retrieval in DTNs with Restricted Mobility, *IEEE Transactions on Network and Service Management*, Vol. 16, No. 2, pp. 701-714, 2019.
19. S. Karimian Aliabadi, D. Ardagna, R. Entezari-Maleki, E. Gianniti, and A. Movaghar, Analytical composite performance models for Big Data applications. *J. Network and Computer Applications*, Vol. 142, pp. 63-75, 2019.
20. B. Barzegar, H. Motameni, A. Movaghar, EATSDCD: A green energy-aware scheduling algorithm for parallel task-based application using clustering, duplication and DVFS technique in cloud data centers. *Journal of Intelligent and Fuzzy Systems*, Vol. 36, No. 6, pp. 5135-5152, 2019.
21. A. Ghandomi, M. Reshadi, A. Movaghar and A. Khademzadeh, Hyb-SMRP: A Hybrid Scheduling Algorithm in Hadoop MapReduce Framework, *Journal of Big Data*, Vol. 6, No. 106, Nov. 2019.
22. M. Golkarifard, J. Yang, Z. Huang, A. Movaghar and P. Hui, Dandelion: A Unified Code Offloading System for Wearable Computing, *IEEE Transactions on Mobile Computing*, Vol. 18, No. 3, pp. 546-559, March 2019.
23. R. Ghafouri, A. Movaghar and M. Mohsenzadeh, A budget constrained scheduling algorithm for executing workflow application in infrastructure as a service clouds, *Peer-to-Peer Networking and Applications*, Vol. 12, No. 1, pp. 241-248, January 2019.
24. M. Nikravan, A. Movaghar and M. Hosseinzadeh, A Lightweight Sign-cryption Scheme for Defense Against Fragment Duplication Attack in the 6LoWPAN Networks, *Peer-to-Peer Networking and Applications*, Vol. 12, No. 1, pp. 209 - 226, January 2019.
25. S. Bagholizadeh, A. Movaghar and N. Majidi, A Uniformization-Based Algorithm for Continuous-Time Stochastic Games Model Checking, *Theoretical Computer Science*, Vol. 756, pp. 1-18, January 2019.

26. M. Ebrahimi, G. Sotudeh and A. Movaghar, Symbolic Checking of Fuzzy CTL on Fuzzy Program Graph, *Acta Informatica*, Vol. 56, No. 1, pp. 1-33, 2019.
27. M. Habibi, M. Fazli and A. Movaghar, Efficient distribution of requests in federated cloud computing environments utilizing statistical multiplexing, *Future Generation Comp. Syst.*, Vol. 90, pp. 451-460, 2019.
28. M. Bagheri, M. Sirjani, E. Khamespanah, N. Khakpour, I. Akkaya, A. Movaghar and E.A. Lee, Coordinated Actor Model for Self-adaptive Track-based Traffic Control Systems, *Journal of Systems and Software*, Vol. 143, pp. 116-139, Sept. 2018.
29. R. Ghafouri, A. Movaghar and M. Mohsenzadeh, Time-cost efficient scheduling algorithms for executing workflow in infrastructure as a service clouds, *Wireless Personal Communications*, Vol. 103, No. 3, pp. 2035-2070, 2018.
30. R. Entezari-Maleki, K. S. Trivedi, L. Sousa, and A. Movaghar, Performability-based Workflow Scheduling in Grids, *The Computer Journal*, Vol. 61, No. 10, pp. 1479-1495, Oct. 2018.
31. R. Entezari-Maleki, M. Gharib, M. Khosravi and A. Movaghar, IDS Modeling and Security Evaluation in WANETs using Stochastic Models, *International Journal of Ad Hoc and Ubiquitous Computing*, Vol. 27, No. 3, pp. 171-186, 2018.
32. A. Dehlaghi-Ghadim, R. Entezari-Maleki, and A. Movaghar, Cost-Efficient Scheduling for Deadline Constrained Grid Workflows, *Computing and Informatics*, Vol. 37, No. 4, pp. 838-864, 2018.
33. E. Ataie, R. Entezari-Maleki, S.E. Etesami, B. Egger, D. Ardagna, and A. Movaghar, Power-aware Performance Analysis of Self-Adaptive Resource Management in IaaS Clouds, *Future Generation Computer Systems (FGCS)*, Vol. 86, pp. 134-144, March 2018.
34. H. Mahyar, R. Hasheminezhad, E. Ghalebi, A. Nazemian, R. Grasu, A. Movaghar, and H.R. Rabiee, Compressive Sensing of High Betweenness Centrality Nodes in Networks, *Physica A: Statistical Mechanics and its Applications*, Vol. 497, No. 8, pp. 166 - 184, May 2018.
35. H. Mahyar, R. Hasheminezhad, E. Ghalebi, A. Nazemian, R. Grasu, A. Movaghar, and H.R. Rabiee, Identifying Central Nodes for Information Flow in Social Networks using Compressive Sensing, *Soc. Netw. Anal. Min.*, Vol. 33, No. 8, pp. 1- 24, March 2018.
36. M. Nikravan, A. Movaghar and M. Hosseinzadeh, A Lightweight Defense Approach to Mitigate Version Number and Rank Attacks in Low-Power

- and Lossy Networks, *Wireless Personal Communications*, Vol. 99, No. 2, pp. 1035 - 1059, March 2018.
37. R. Entezari-Maleki, M. Bagheri, S. Mehri, and A. Movaghar, Performance Aware Scheduling Considering Resource Availability in Grid Computing, *Engineering with Computers.*, Vol.33, No. 2, pp.191-206, April 2017.
 38. 10. M. Bagheri, E. Khamespanah, N. Khakpour, M. Sirjani, A. Movaghar, and E.A. Lee, Runtime compositional analysis of track-based traffic control systems, *SIGBED Review*, Vol. 14, No. 3, pp. 38-39, 2017.
 39. S.M. Taheri, H Mahyar, M. Firouzi, E. Ghalebi, R. Grosu and A. Movaghar, Hellrank: a Hellinger-based centrality measure for bipartite social networks, *Soc. Netw. Anal. Min.*, Vol. 22, No. 7, pp. 1- 16, May 2017.
 40. R. Entezari-Maleki, L. Sousa, and A. Movaghar, Performance and Power Modeling and Evaluation of Virtualized Servers in IaaS Clouds, *Information Sciences*, Vol. 394-395, pp.106-122, July 2017.
 41. Z. Shariat, A. Movaghar and M. Hoseinzadeh, A learning automata and clustering-based routing protocol for named data networking, *Telecommunication Systems*, Vol. 65, Issue 1, pp.9-29, May 2017.
 42. R. Entezari-Maleki, L. Sousa, and A. Movaghar, Performance and Power Modeling and Evaluation of Virtualized Servers in IaaS Clouds, *Information Sciences*, Vol. 394-395, pp.106-122, July 2017.
 43. Z. Shariat, A. Movaghar and M. Hoseinzadeh, A learning automata and clustering-based routing protocol for named data networking, to appear in the *Telecommunication Systems*, Vol. 65, Issue 1, pp.9-29, May 2017.
 44. M. Gharib, Z. Moradlou; M.A. Doostari, and A. Movaghar, Fully Distributed ECC-based Key Management for Mobile Ad Hoc Networks, *Computer Networks*, vol. 113, No.11 , pp. 269-283, Feb 2017.
 45. M. Gharib, H. Yousefzadeh and A. Movaghar, A Survey of Key Pre- Distribution and Overlay Routing in Unstructured Wireless Networks, *Scientia Iranica*, Vol. 23, No. 6, pp. 2831-2844, Oct. 2016.
 46. M. Hatamian, H. Barati, A. Movaghar, N. Naghizadeh, CGC: centralized genetic-based clustering protocol for wireless sensor networks using onion approach, *Telecommunication Systems*.Telecommunication Systems, Vol. 62, No. 3, pp. 611-623, 2016.
 47. M. Gharib, H. Yousefzadeh and A. Movaghar, A Survey of Key Pre-Distribution and Overlay Routing in Unstructured Wireless Networks, *Scientia Iranica*, Vol. 23, No. 6, pp. 2831-2844, Oct. 2016.

48. A. Barati, A. Movaghar, M. Sabaii, RDTP: reliable data transport protocol in wireless sensor networks, *Telecommunication Systems*, Vol. 62, No. 3, pp. 611 - 623, 2016.
49. M. Gharib, H. Yousefzadeh, A. Movaghar, Secure Overlay Routing Using Key Pre-Distribution: A Linear Distance Optimization Approach, *IEEE Transactions on Mobile Computing*, Vol. 15, No. 9, pp. 2333 - 2344, Sept. 2016.
50. A. Barati, A. Movaghar and M. Sabaii, RDTP: reliable data transport protocol in wireless sensor networks, *Telecommunication Systems*, Vol. 62, No. 3, pp. 611-623, 2016.
51. H. Yousefi, M. Malekimajd, M. Ashuri, A. Movaghar, Fast Aggregation Scheduling in Wireless Sensor Networks, *IEEE Transactions on Wireless Communications*, Vol. 14, No. 6, pp. 3402 - 3414, 2015.
52. M.E. Esmaili, R. Entezari-Maleki, A. Movaghar, Improved Region-Based TCTL Model Checking of Time Petri Nets, *JCSE*, Vol. 9, No. 1, pp. 9-19, 2015.
53. M. Ashouri, H. Yousefi, J. Basiri, A.M.A. Hemmatyar, A. Movaghar, PDC: Prediction-based data-aware clustering in wireless sensor networks, *J. Parallel Distrib. Comput.*, Vol. 81-82, pp. 24-35, 2015.
54. M. Malekimajd, A. Movaghar and S. Hosseini Motlagh, Minimizing latency in geo-distributed clouds, *The Journal of Supercomputing*, Vol. 71, No. 12, pp. 4423-4445, 2015.
55. H. Barati, A. Movaghar and A. M. Rahmani, EACHP: Energy Aware Clustering Hierarchy Protocol for Large Scale Wireless Sensor Networks, *Wireless Personal Communications*, Vol. 85, No. 3, pp. 765-789, 2015.
56. R. Entezari-Maleki, K.S. Trivedi and A. Movaghar, Performability Evaluation of Grid Environments using Stochastic Reward Nets, *IEEE Transactions on Dependable and Secure Computing (TDSC)*, Vol. 12, No. 2, pp. 204-216, 2015.
57. S. Aliakbary, J. Habibi and A. Movaghar, Feature Extraction from Degree Distribution for Comparison and Analysis of Complex Networks, *The Computer Journal*, Oxford University Press, Vol. 58, Issue 9, pp. 2079-2091, 2015.
58. S. Aliakbary, S. Motallebi, S. Rashidian, J. Habibi, and A. Movaghar, Towards a Size-Independent Distance Metric for Topological Comparison of Complex Networks, *Chaos: An Interdisciplinary Journal of Nonlinear Science*, Vol. 25, No. 2, 2015, <http://dx.doi.org/10.1063/1.4908605>.

59. S. Aliakbary, S. Motallebi, S. Rashidian, J. Habibi, and A. Movaghar, Noise-Tolerant Model Selection and Parameter Estimation for Complex Networks, *Physica A: Statistical Mechanics and its Applications*, Vol. 427, pp.100–112, June 2015.
60. G. Sotudeh and A. Movaghar, Abstraction and approximation in fuzzy temporal logics and models, *Formal Aspects of Computing (FAC)*, Vol. 27, Issue 2, pp. 309-334, Nov. 2014.
61. R. Entezari-Maleki, A. Mohammadkhan, H.Y. Yeom and A. Movaghar, Combined Performance and Availability Analysis of Distributed Resources in Grid Computing, *The Journal of Supercomputing*, Vol. 69, No. 2, pp. 827-844, 2014.
62. S. Kardani-Moghaddam, R. Entezari-Maleki and A. Movaghar, A Cost Efficient Two-level Market Model for Task Scheduling Problem in Grid Environment, *Iranian Journal of Science & Technology, Transactions of Electrical Engineering*, Vol. 38, No. 1, pp. 73-90, 2014.
63. M. Mohaqeqi, M. Kargahi, A. Movaghar, Analytical Leakage-Aware Thermal Modeling of a Real-Time System, *IEEE Transactions on Computers (TC)*, Vol. 63, No. 6, pp. 1377-1391, June 2014.
64. A. Barati, A. Movaghar, M. Sabaei, Energy Efficient and High Speed Error Control Scheme for Real Time Wireless Sensor Networks, *International Journal of Distributed Sensor Networks*, Vol. 2014, Article ID 698125, 9 pages, 2014. doi:10.1155/2014/698125.
65. S. Adabi, A. Movaghar, A.M. Rahman, H. Beigy and H. Dastmalchy-Tabrizi, A new fuzzy negotiation protocol for grid resource allocation, *Elsevier Journal of Network and Computer Applications*, Vol. 37, No. 1, pp. 89-126, January 2014.
66. S. Adabi, A. Movaghar and A.M. Rahmani, Bi-level fuzzy based advanced reservation of cloud workflow applications on distributed grid resources, *The Journal of Supercomputing*, Vol. 67, No. 1, pp. 175-218, January 2014.
67. F. Ghods, H. Yousefi and A. Movaghar, MC-MLAS: Multi-Channel Minimum Latency Aggregation Scheduling in Wireless Sensor Networks, *Elsevier - Computer Networks* Vol. 57, Issue 18, pp. 3812-3825, December 2013.
68. H. Motallebi, M. Abdollahi Azgomi, M. S. Mirzaei and A. Movaghar, A New Extension of Activity Networks for Modelling and Verification of Timed Systems, to appear in *Turkish Journal of Electrical Engineering & Computer Sciences (TJEECS)*, Vol. 21, pp. 1751-1779, 2013.

69. S. Adabi, A. Movaghar, A.M. Rahmani and H. Beigy, Negotiation strategies considering market, time and behavior functions for resource allocation in computational grid, *The Journal of Supercomputing*, Vol. 66, No. 3, pp. 1350-1389, December 2013.
70. S. Adabi, A. Movaghar, A.M. Rahmani and H. Beigy, Market-based Grid Resource Allocation using New Negotiation Model, *Elsevier Journal of Network and Computer Applications*, Vol. 36, No. 1, pp. 543-565, January 2013.
71. A. Balador, A. Movaghar, S. Jabbehdari, D. Kanellopoulos, A Novel Contention Window Control Scheme for IEEE 802.11 WLANs, *IETE Technical Review*, Vol. 29, Issue 3, pp. 202-212, May-June 2012.
72. H. Yousefi, M.H. Yeganeh, N. Alinaghypour, A. Movaghar, Structure-free Real-time Data Aggregation in Wireless Sensor Networks, *Elsevier Journal of Computer Communications (COMCOM12)*, Vol. 35, No. 9, pp. 1132-1140, 2012.
73. N. Tabbaa, R. Entezari-Maleki, and A. Movaghar, Reduced Communications Fault Tolerant Task Scheduling Algorithm for Multiprocessor Systems, *Procedia Engineering*, Vol. 29, pp. 3820-3825, 2012.
74. S. Kardani-Moghaddam, F. Khodadadi, R. Entezari-Maleki, and A. Movaghar, A Hybrid Genetic Algorithm and Variable Neighborhood Search for Task Scheduling Problem in Grid Environment, *Procedia Engineering*, Vol. 29, pp. 3808-3814, 2012.
75. R. Entezari-Maleki and A. Movaghar, A Probabilistic Task Scheduling Method for Grid Environments, *Future Generation Computer Systems (FGCS)*, Vol. 28, pp. 513-524, 2012.
76. M. Malekimaajid, M.R. Hoseiny-Farahabady, A. Movaghar and H. Sarbazi-Azad, Pancyclicity of OTIS (Swapped) Networks based on properties of the factor graph, *Information Processing Letters*, Vol. 111, No. 23-24, pp. 1114-1119, December 2011.
77. M. Kargahi and A. Movaghar, Performance Optimization Based on Analytical Modeling in a Real-Time System with Constrained Time/Utility Functions, *IEEE Transactions on Computers (TC)*, Vol. 60, No. 8, pp. 1169-1181, August 2011.
78. F. Ghassemi, W.J. Fokkink and A. Movaghar, Verification of Mobile Ad Hoc Networks: An Algebraic Approach, *Theoretical Computer Science*, Vol. 412, No. 28, pp. 3262-3282, June 2011.

79. F. Reza Entezari-Maleki and A. Movaghar, A Genetic-Based Scheduling Algorithm to Minimize the Makespan of the Grid Applications, *International Journal of Grid and Distributed Computing (IJGDC)*, Vol. 4, No. 2, pp 11-24, June 2011.
80. A. Movaghar, Analysis of a Dynamic Assignment of Impatient Customers to Parallel Queues, *Queueing Systems*, Vol. 67, No. 3, pp. 251-273, 2011.
81. E. Heidari and A. Movaghar, An Efficient Method Based on Genetic Algorithms to Solve Sensor Network Optimization Problem, *International Journal on Applications of Graph Theory in Wireless Ad hoc Networks and Sensor Networks (GRAPH-HOC)*, Vol. 3, No. 1, pp. 18-33, March 2011.
82. T. Shafiei, M.R. Hoseiny-Farahabady, A. Movaghar and H. Sarbazi-Azad, On pancyclicity properties of OTIS-mesh , *Information Processing Letters*, Vol. 111, No. 8, pp. 353-359, March 2011.
83. F. Ghassemi, W. Fokkink and A. Movaghar, Equational Reasoning on Mobile Ad Hoc Networks, *Fundamenta Informaticae*, Vol. 105, No. 4, 2010.
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