

CURRICULUM VITAE

Ali Movaghar

ADDRESS

- Visiting Professor
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RESEARCH INTERESTS

- Performance Analysis
- 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

- Visiting Professor, Department of Electrical Engineering and Computer Science, The University of Michigan, Ann Arbor, MI, USA, August 2023 - present
- Professor, Department of Computer Engineering, Sharif University of Technology, Tehran, Iran, February 2007 - present
- Visiting Professor, Department of Electrical Engineering and Computer Science, University of California, Irvine, CA, USA, January 2011-August 2011.
- Associate Professor, Department of Computer Engineering, Sharif University of Technology, Tehran, Iran, March 2000 - February 2007
- Assistant Professor, Department of Computer 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 Engineering, Sharif University of Technology, Tehran, Iran, May 2015-November 2015.
- Chair, Software Group at the Department of Computer Engineering, Sharif University of Technology, Tehran, Iran, October 2012 - October 2014.
- Chair, Information Technology Group at the Department of Computer 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 Engineering, Sharif University of Technology, Tehran, Iran, 1994-1996, 2002-2006.
- Chair, Software Group at the Department of Computer 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:*
 - Software Engineering
 - 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.

HONORS

- Distinguished Researcher at Sharif University of Technology in 2010 and 2019
- Distinguished Professor of the Iranian Academy of Sciences in 2021

EDITORIAL ACTIVITIES

- Member of Editorial Board, Queueing Models and Service Management (QMSM)
- Member of Editorial Board, International Journal of Information Communication Technology (IJICT)
- Member of Editorial Board, Journal of AI and Data Mining (JADM)
- Member of Editorial Board, Journal of Algorithms and Computation (JAC)

- Member of Editorial Board, Iran Journal of Computer Science (IJCS)
- Editor-in-Chief, Journal of Computer and Robotics (JCR)
- Editor-in-Chief, Journal of Advances in Computer Research (JACR)
- Editor-in-Chief, Journal of Computer Science and Information Technology (JCSIT)

PROFESSIONAL ACTIVITIES

- Program Committee Member, 9th IPM International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN 21), IPM, Tehran, Iran, May 2023.
- Program Committee Member, 27th Annual National CSI Computer Conference, Sharif University of Technology, Tehran, Iran, February 23 - February 24, 2022.
- Program Committee Member, 9th IPM International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN 21), IPM, Tehran, Iran, May 2021.
- The CSI Symposium on Real-Time and Embedded Systems and Technologies (RTEST 2020), IPM, Tehran, Iran, June 10-11, 2020.
- Program Committee Member, 8th IPM International Conference on Fundamentals of Software Engineering: Theory and Practice (FSEN 19), IPM, 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)
- Associate 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. L. Rashidi, D. Towsley, A. Mohseni-Kabir and A. Movaghar, On the Performance Analysis of Epidemic Routing in Non-Sparse Delay Tolerant Networks, . *IEEE Transactions on Mobile Computing*, Vol. 22, No. 7, pp. 4134-4149, 2023.
2. B. T. Tabarsi, A. Rezaee, A. Movaghar, ROGI: Partial Computation Offloading and Resource Allocation in the Fog-Based IoT Network Towards Optimizing Latency and Power Consumption, *Cluster Computing*, Vol. 26, No. 3, pp.1767-1784, 2023.
3. F. Beikzadeh Abbasi, A. Rezaee, S. Adabi, A. Movaghar, Fault-tolerant scheduling of graph-based loads on fog/cloud environments with multi-level queues and LSTM-based workload prediction, *Comput. Networks*, Vol. 235, 109964, 2023.
4. S. Karimian-Aliabadi, M.M. Aseman-Manzar, R. Entezari-Maleki, D. Ardagna, B. Egger and A. Movaghar, Fixed-point Iteration Approach to Spark Scalable Performance Modeling and Evaluation, *IEEE Transactions on Cloud Computing*, Vol. 11, No. 1, pp. 897-910, 2023.
5. M.M. Aseman-Manzar, S. Karimian Aliabadi, R. Entezari-Maleki, B. Egger, A. Movaghar, Cost-Aware Resource Recommendation for DAG-Based Big Data Workflows: An Apache Spark Case Study, *IEEE Transactions on Service Computing*, Vol.16, No. 3, pp. 726-1737, 2023.
6. S. Aalibagi, H. Mahyar, A. Movaghar and H.E. Stanley, A Matrix Factorization Model for Hellinger-based Trust Management in Social Internet of Things, *IEEE Transactions on Dependable and Secure Computing*, Vol. 19, No. 4, 2274-2285, 2022.

7. M. Bagheri, M. Sirjani, E. Khamespanah, C. Baier and A. Movaghar, Magnifier: A Compositional Analysis Approach for Autonomous Traffic Control, to appear in the *IEEE Transactions on Software Engineering*, Vol. 48(, No. 8, pp. 2732-2747, 2022.
8. H. Mohtashami, A. Movaghar, M. Teshnehlal, Lifetime Improvement Based on Event Occurrence Patterns for Wireless Sensor Networks Using Multi-Objective Optimization, *Wireless Personal Communications*, Vol. 125, No. 4, pp. 3333-3349, 2022.
9. E. Ataie, R. Entezari-Maleki, S. E. Etesami, B. Egger, L. Sousa, A. Movaghar, Modeling and evaluation of dispatching policies in IaaS cloud data centers using SANs, *Sustain. Comput. Informatics Syst.*, Vol. 33, 100617, 2022.
10. R. Ghafouri and A. Movaghar, An adaptive and deadline-constrained workflow scheduling algorithm in infrastructure as a service cloud, *Iran J. Comput. Sci.*, Vol. 5, No. 1, 2022.
11. E. Heidari, A. Movaghar, H. Motameni and B. Barzegar: A novel approach for clustering and routing in WSN using genetic algorithm and equilibrium optimizer, *Int. J. Commun. Syst.*, Vol. 35, No.10, 2022.
12. A. Amini Motlagh, A. Movaghar, and A. M. Rahmani, A new reliability-based task scheduling algorithm in cloud computing, *Int. J. Commun. Syst.*, Vol. 35, No. 3, 2022.
13. R. Ghazali, S. Adabi, A. Rezaee, D.G. Down and A. Movaghar, CLQLMRS: improving cache locality in MapReduce job scheduling using Q-learning, *Journal of Cloud Computing*, Vol. 11, No. 45, 2022.
14. S.M. Safi, A. Movaghar and M. Ghorbani, Privacy protection scheme for the mobile social network, *J. King Saud Univ. Comput. Inf. Sci.*, Vol. 34, No. 7, pp. 4062-4074, 2022.
15. M. Ahmadi, M. Golkarifard. A. Movaghar and Hamed Yousefi, Processor Sharing Queues with Impatient Customers and State-dependent Rates, *IEEE/ACM Transactions on Networking (TON)*, Vol. 29, No. 6, pp. 2467-2477, December 2021.
16. S.M. Safi, A. Movaghar and K. Safikhani Mahmoodzadeh, A framework for protecting privacy on mobile social networks, *Mobile Networks and Applications.*, Vol. 26, No. 3, pp. 1289-1299, 2021.
17. M. Golkarifard, A. Movaghar, Dynamic VNF Placement, Resource Allocation, and Traffic Routing in 5G, *Computer Networks*, Vol. 188, pp. 107830, April 2021.

18. M. Faraji Shoyari, E. Ataie, R. Entezari-Maleki, and A. Movaghar, Availability Modeling in Redundant OpenStack Private Clouds, *Software: Practice and Experience*, Vol. 51, No. 6, pp. 1218-1241, June 2021.
19. L. Rashidi, A. Dalili-Yazdi, R. Entezari-Maleki, L. Sousa and A. Movaghar, Modeling Epidemic Routing: Capturing Frequently Visited Locations While Preserving Scalability, *IEEE Transactions on Vehicular Technology*, Vol. 70, No. 3, pp. 2713-2727, March 2021.
20. P. Khanzadi, S. Adabi, B. Majidi and A. Movaghar, Optimal VM-to-user mapping in a cloud environment based on sustainable strategy space theory, *Cluster Computing*, Vol. 24, No. 4, pp. 3329-3347, 2021.
21. R. Ghazali, S. Adabi, D.G. Down and A. Movaghar, A classification of Hadoop job schedulers based on performance optimization approaches, *Cluster Computing*, Vol. 24, No. 4, pp. 3381-3403, 2021.
22. S.H. Ghafouri, S.M. Hashemi, M.R. Razzazi and A. Movaghar, Web service quality of service prediction via regional reputation-based matrix factorization, *Concurrency and Computation: Practice and Experience*, Vol. 33, No. 17, September 2021.
23. P. Khanzadi, B. Majidi, S. Adabi, J.C. Patra and A. Movaghar, Robust fuzzy rough set based dimensionality reduction for big multimedia data hashing and unsupervised generative learning, *Multimedia Tools and Applications*, Vol. 80, No. 12, pp. 17745-17772, 2021.
24. Rezaei, M. Gharib, R. Entezari-Maleki, K. Trivedi and A. Movaghar, Modeling and Evaluation of Multi-hop Wireless Networks using SRNs, *IEEE Transactions on Network Science and Engineering*, Vol. 8, No. 1, pp. 662-679, 2021.
25. M. Askarnejad, M. Malekimajd and A. Movaghar, Network and Application-Aware Cloud Service Selection in Peer-Assisted Environments, *IEEE Transactions on Cloud Computing*, Vol. 9, No. 1, pp. 258-271, 2021.
26. 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.
27. 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.
28. 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.

29. 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.
30. 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.
31. A. Ghandomi, A. Movaghar, M. Reshadi, and A. Khademzadeh, Designing a MapReduce Performance Model in Distributed Heterogeneous Platforms Based on Benchmarking Approach, *The Journal of Supercomputing*, Vol. 76, No. 9, pp. 7177-7203, January 2020.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. 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.

39. 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.
40. R. Ghafouri, A. Movaghar, and M. Mohsenzadeh, A budget constrained scheduling algorithm for executing workflow application in infrastructure as a service cloud, *Peer-to-Peer Networking and Applications*, Vol. 12, No. 1, pp. 241-248, January 2019.
41. M. Nikravan, A. Movaghar and M. Hosseinzadeh, A Lightweight Sign-encryption 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.
42. 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.
43. 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.
44. 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.
45. S. Fakhrolmobasheri, E. Ataie and A. Movaghar, Modeling, and Evaluation of Power-Aware Software Rejuvenation in Cloud Systems, *Algorithms*, Vol. 11, No.10, 2018
46. 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.
47. R. Ghafouri, A. Movaghar and M. Mohsenzadeh, Time-cost efficient scheduling algorithms for executing workflow in infrastructure as a service cloud, *Wireless Personal Communications*, Vol. 103, No. 3, pp. 2035-2070, 2018.
48. 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.
49. S. Rezaei, M. Gharib and A. Movaghar, Throughput Analysis of IEEE 802.11 Multi-hop Wireless Networks with Routing Consideration: A General Framework, *IEEE Transactions on Communications*, Vol.66, No. 11, June 2018.

50. 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.
51. 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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.
59. 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.
60. 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.

61. 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.
62. 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.
63. 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.
64. 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.
65. 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.
66. 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.
67. 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.
68. 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.
69. 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.
70. H. Yousefi, M. Malekimaajid, M. Ashuri, A. Movaghar, Fast Aggregation Scheduling in Wireless Sensor Networks, *IEEE Transactions on Wireless Communications*, Vol. 14, No. 6, pp. 3402 - 3414, 2015.
71. 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.

72. 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.
73. 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.
74. 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.
75. 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.
76. 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.
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